

April 2005

Nursing Best Practice Guideline *Shaping the future of Nursing*

Interventions for Postpartum Depression



RNAO

Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers
autorisés de l'Ontario

NURSING BEST PRACTICE GUIDELINES PROGRAM



Greetings from Doris Grinspun

Executive Director

Registered Nurses' Association of Ontario

It is with great excitement that the Registered Nurses' Association of Ontario (RNAO) disseminates this nursing best practice guideline to you. Evidence-based practice supports the excellence in service that nurses are committed to deliver in our day-to-day practice.

We offer our endless thanks to the many institutions and individuals that are making RNAO's vision for Nursing Best Practice Guidelines (NBPGs) a reality. The Government of Ontario recognized RNAO's ability to lead this program and is providing multi-year funding. Tazim Virani – NBPG program director – with her fearless determination and skills, is moving the program forward faster and stronger than ever imagined. The nursing community, with its commitment and passion for excellence in nursing care, is providing the knowledge and countless hours essential to the creation and evaluation of each guideline. Employers have responded enthusiastically to the request for proposals (RFP), and are opening their organizations to pilot test the NBPGs.

Now comes the true test in this phenomenal journey: Will nurses utilize the guidelines in their day-to-day practice?

Successful uptake of these NBPGs requires a concerted effort of four groups: nurses themselves, other healthcare colleagues, nurse educators in academic and practice settings, and employers. After lodging these guidelines into their minds and hearts, knowledgeable and skillful nurses and nursing students need healthy and supportive work environments to help bring these guidelines to life.

We ask that you share this NBPG, and others, with members of the interdisciplinary team. There is much to learn from one another. Together, we can ensure that Ontarians receive the best possible care every time they come in contact with us. Let's make them the real winners of this important effort!

RNAO will continue to work hard at developing and evaluating future guidelines. We wish you the best for a successful implementation!

Doris Grinspun, RN, MSN, PhD(cand), OOnt



Executive Director

Registered Nurses' Association of Ontario

Interventions for Postpartum Depression

Disclaimer

These best practice guidelines are related only to nursing practice and not intended to take into account fiscal efficiencies. These guidelines are not binding for nurses and their use should be flexible to accommodate client/family wishes and local circumstances. They neither constitute a liability or discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor the Registered Nurses' Association of Ontario (RNAO) give any guarantee as to the accuracy of the information contained in them, nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omission in the contents of this work. Any reference throughout the document to specific pharmaceutical products as examples does not imply endorsement of any of these products.

Copyright

With the exception of those portions of this document for which a specific prohibition or limitation against copying appears, the balance of this document may be produced, reproduced and published, in any form, including in electronic form, for educational or non-commercial purposes, without requiring the consent or permission of the Registered Nurses' Association of Ontario, provided that an appropriate credit or citation appears in the copied work as follows:

Registered Nurses' Association of Ontario (2005). *Interventions for Postpartum Depression*. Toronto, Canada: Registered Nurses' Association of Ontario.

How to Use this Document

This nursing best practice guideline is a comprehensive document providing resources necessary for the support of evidence-based nursing practice. The document needs to be reviewed and applied, based on the specific needs of the organization or practice setting/environment, as well as the needs and wishes of the client. Guidelines should not be applied in a “cookbook” fashion but used as a tool to assist in decision making for individualized client care, as well as ensuring that appropriate structures and supports are in place to provide the best possible care.

Nurses, educators, administrators, and other health care professionals who are leading and facilitating practice change will find this document valuable for the development of policies, procedures, protocols, educational programs, assessment and documentation tools. It is recommended that the nursing best practice guidelines be used as a resource tool. Nurses providing direct client care will benefit from reviewing the recommendations, the evidence in support of the recommendations and the process that was used to develop the guidelines. However, it is highly recommended that practice settings/environments adapt these guidelines in formats that would be user-friendly for daily use. This guideline has some suggested formats for such local adaptation and tailoring.

Organizations wishing to use the guideline may decide to do so in a number of ways:

- Assess current nursing and health care practices using the recommendations in the guideline.
- Identify recommendations that will address identified needs or gaps in services.
- Systematically develop a plan to implement the recommendations using associated tools and resources.

RNAO is interested in hearing how you have implemented this guideline. Please contact us to share your story. Implementation resources will be made available through the RNAO website www.rnao.org/bestpractices to assist individuals and organizations to implement best practice guidelines.



Interventions for Postpartum Depression

Program Team:

Tazim Virani, RN, MScN, PhD(candidate)
Program Director

Stephanie Lappan-Gracon, RN, MN
Program Coordinator – Champions Network

Heather McConnell, RN, BScN, MA(Ed)
Program Manager

Josephine Santos, RN, MN
Program Coordinator

Jane M. Schouten, RN, MBA
Program Coordinator

Bonnie Russell, BJ
Program Assistant

Carrie Scott
Administrative Assistant

Julie Burris
Administrative Assistant

Keith Powell, BA, AIT
Web Editor

Registered Nurses' Association of Ontario
Nursing Best Practice Guidelines Program
111 Richmond Street West, Suite 1100
Toronto, Ontario M5H 2G4
Website: www.rnao.org/bestpractices

Development Panel Members

Cindy-Lee Dennis, RN, MScN, PhD

Team Leader

*Assistant Professor
Faculty of Nursing
University of Toronto
Toronto, Ontario*

Sue Bookey-Bassett, RN, BScN, MEd

*Project Manager
Near Miss Study, University of Toronto
and Independent Consultant
Oakville, Ontario*

Donna Bottomley, BA, MSW, RSW

*Perinatal, Obstetrical & NICU Social Worker
Ottawa Hospital
General Campus
Ottawa, Ontario*

Barbara Aileen Bowles, RN, BSN, PNC(C)

*Staff Nurse
Maternal Child Family Centre
St. Catharines General Site
Niagara Health System
St. Catharines, Ontario*

Judi DeBoeck, RN, BA CHPE

*Public Health Nurse
Mother Reach Program
County of Oxford
Public Health & Emergency Services
Woodstock, Ontario*

Marilyn Evans, RN, PhD

*Assistant Professor
School of Nursing
University of Western Ontario
London, Ontario*

Denise Hébert, RN, BScN, MSc

*Family Health Specialist
Healthy Babies, Healthy Children Program
Ottawa Public Health
Ottawa, Ontario*

JoAnne Hunter, BScN, MHSc, RN(EC)

*Primary Care Nurse Practitioner
Family Health Centre
University Health Network
Toronto, Ontario*

Stephanie Lappan-Gracon, RN, MN

*RNAO Program Staff
Facilitator, Program Coordinator
Nursing Best Practice Guidelines Program
Registered Nurses' Association of Ontario
Toronto, Ontario*

**Elizabeth McGroarty, RN, COHN(C) COHN-S,
CRSP, Cert HRM**

*Occupational Health Consultant
Myriad Services
Toronto, Ontario*

Karen McQueen, RN, BScN, MA(N)

*Assistant Professor
Faculty of Nursing
Lakehead University
Thunder Bay, Ontario*

Phyllis Montgomery, RN, MScN, PhD

*Associate Professor
School of Nursing
Laurentian University
Sudbury, Ontario*

Declarations of interest and confidentiality were made by all members of the guideline development panel.
Further details are available from the Registered Nurses' Association of Ontario.

Lori Ross, PhD

*Research Scientist
Women's Mental Health &
Addiction Research Section
Centre for Addiction & Mental Health
Toronto, Ontario*

Marcia Starkman, MSN, RN, CS

*Nurse Psychotherapist
Postpartum Partnership
Richmond Hill, Ontario*

Sharon Thompson, RN, BScN

*Nurse – Counsellor
Women's Health Centre
St. Joseph's Health Centre
Toronto, Ontario*

Ulla Wise, RN, MN

*Public Health Nurse – Mental Health Specialist
Toronto Public Health
Toronto, Ontario*

Bonnie Wooten, RN, MPA

*Program Manager
Family Health Services
Middlesex-London Health Unit
London, Ontario*

The RNAO and the development panel would like to acknowledge Dawn Kingston, RN, BSc, MSc, Research Assistant, for her work in conducting the quality appraisal of the literature and preparation of evidence tables.

The RNAO development panel would like to acknowledge the following individuals for providing valuable feedback in critically appraising this guideline in relation to the AGREE Collaboration standards.

Donna Ciliska, RN, PhD

*Professor, School of Nursing
McMaster University & Consultant
City of Hamilton, Public Health Research
Education & Development Program
Hamilton, Ontario*

Wendy Sword, RN, PhD

*Associate Professor, School of Nursing
McMaster University & Consultant
City of Hamilton, Public Health Research
Education and Development Program
Hamilton, Ontario*



Acknowledgement

Stakeholders representing diverse perspectives were solicited for their feedback and the Registered Nurses' Association of Ontario wishes to acknowledge the following for their contribution in reviewing this Nursing Best Practice Guideline:

Diane Alain, I.A M.Ed	Teacher – Professeure, La Cité collégiale, University of Ottawa, Ottawa, Ontario
Beth Baxter, RN, BScN	Public Health Nurse, Child and Reproductive Health, Hastings & Prince Edward Counties Health Unit, Trenton, Ontario
Margaret Belliveau, RN, BSN, PNC(C)	Perinatal Nurse Educator, St. Joseph's Health Care, London, Ontario
Debra Bick, RM, BA (Hons), MMedSc, PhD	Professor of Midwifery and Women's Health Centre for Research in Midwifery and Childbirth, Faculty of Research in Midwifery and Childbirth, Faculty of Health and Human Sciences, London, United Kingdom
Diane Clements, RN, MN	Director, Nursing Directorate, Ministry of Health Services, Victoria, British Columbia
Laura Cook, RN, BScN	Public Health Nurse, Perth District Health Unit, Stratford, Ontario
Diane de Camps Meschino, Psychiatrist, MD, FRCPC BSc(Hons)	Leader, Reproductive Life Stages Program Sunnybrook & Women's Health Sciences Centre, Women's College Site, Toronto, Ontario
Sharon Dore, RN, PhD	Advanced Practice Nurse, Clinical Nurse Specialist, Women's Health Hamilton Health Sciences, Hamilton, Ontario
Rebecca Dupuis, RN, BAAN	Public Health Nurse, Simcoe County District Health Unit, Midland, Ontario
Sheryl Farrar, BSc, MHSc	Public Health Promotion, Hastings & Prince Edward Counties Health Unit, Belleville, Ontario
Lisebeth Gatkowski, RN, MHN	Community Nurse, Community Liaison Program, St. Joseph's Healthcare: Centre for Mountain Health Services, Hamilton, Ontario
Pat Hanly, RN, BScN,	Public Health Manager, Perth District Health Unit, Stratford, Ontario
Kathryn Hayward-Murray, RN, BA(N), MSc(T), ICCE	Nursing Director, Maternal Child, Credit Valley Hospital, Mississauga, Ontario
Gabriella Herr, RN(EC), BScN, PHCNP	Primary Health Nurse Practitioner, Family Practice, University Health Network, Toronto, Ontario
Susan James, BScN, MN, PhD	Director, Midwifery Education Program, Laurentian University, Sudbury, Ontario
Catharine Kennedy, RN, BScN	Public Health Nurse, Regional Niagara Public Health Department, St. Catharines, Ontario
Lorna Larsen, RN, BScN	Manager, Health Promotion, Oxford County Public Health & Emergency Services, Woodstock, Ontario
Nancy Lynch, RN, BScN	Public Health Nurse, Healthy Babies, Healthy Children Program, Hastings & Prince Edward Counties Health Unit, Belleville, Ontario
Iva MacCausland, RN, BScN	Public Health Nurse, Oxford County Public Health & Emergency Services, Woodstock, Ontario
Karen Mayer, RN	Teacher and staff nurse, Picton, Ontario
Terri McCartney, RN, CPMHN(C)	Educator/Volunteer Coordinator, Canadian Mental Health Association, Woodstock, Ontario

Nursing Best Practice Guideline

Laurie McGill, RN	Consumer, Homes for the Aged & Long Term Care, Toronto, Ontario
Nancy Moore, RN, BScN	Public Health Nurse, Family Health Team, Huron County Health Unit, Clinton, Ontario
Denise Moreau, RN, PhD	Assistant Professor, University of Ottawa, School of Nursing, Ottawa, Ontario
Jim Natis, BA, BSW, MSW, RSW	Social Worker, University Health Network, Toronto, Ontario
Peggy Neil, RN	Public Health Nurse, Healthy Babies, Healthy Children Program, Hastings & Prince Edward Counties Health Unit, Belleville, Ontario
Beverley O'Brien, DNSc, RN, RM	Professor, Faculty of Nursing, University of Alberta, Edmonton, Alberta
Gwen Peterek, RN, BScN, PNC(C)	Perinatal Nurse Consultant, Regional Perinatal Outreach Program of Southwestern Ontario, London, Ontario
Karen Poole, RN, MEd, MA(Nursing)	Acting Director, School of Nursing, Lakehead University, Thunder Bay, Ontario
Andrea Pryce, RN, BScN, PNC(C)	Registered Nurse, Labour and Delivery, Sunnybrook and Women's College Health Sciences Centre, Toronto, Ontario
Rosemary Rak, RN, BScN(Can)	Clinical Nurse Educator, Mental Health and Addiction Program, Royal Victoria Hospital, Barrie, Ontario
Susan Ralyea, RN, BScN, MHSc	Consultant and Educator, Dorchester, Ontario
Maila Riddell, RN, COHN(C), COHNS	Employee Health Coordinator, Toronto Grace Hospital, Toronto, Ontario
Crystal Roach, RN, BScN	Public Health Nurse, Child and Reproductive Health, Hastings & Prince Edward Counties Health Unit, Belleville, Ontario
Emma Robertson Blackmore, PhD, MPhil, BSc(Hons)	Senior Instructor, Department of Psychiatry, Rochester, New York
Michelle Scolaro, RN, CPMHN(C)	Crisis Response Nurse, Halton Healthcare Services, Oakville, Ontario
Verinder Sharma, MB, BS, FRCP(C)	Professor of Psychiatry, University of Western Ontario, London, Ontario
Debbie Shugar, MA S-LP (C), Reg.CASLPO	Manager, Middlesex-London Health Unit, London, Ontario
Joanne Simpson, RN, BScN	Public Health Nurse, Middlesex-London Health Unit, London, Ontario
Meir Steiner, MD, PhD, FRCP(C)	Professor of Psychiatry & Behavioural Neurosciences and Obstetrics & Gynecology, McMaster University, Hamilton, Ontario Director of Research, Department of Psychiatry, Director, Women's Health Concerns Clinic, St. Joseph's Healthcare, Hamilton, Ontario
Victoria Tate	Doula, Mississauga, Ontario
Donna Tucker, RN, MScN	Project Director, RNAO Healthy Work Environments Best Practice Guidelines Project, Toronto, Ontario
Sharon Thompson, RN, BScN	Public Health Nurse, Child and Reproductive Health, Hastings & Prince Edward Counties Health Unit, Belleville, Ontario
Nancy Watts, RN, PNC(C), MN	Clinical Nurse Specialist, Maternal/Newborn Care, London Health Sciences Centre, London, Ontario
Leanne Worsfold, RPN, CBE(C)	Practice Consultant, College of Nurses of Ontario, Toronto, Ontario
Karen Wade, RN, MScN	Toronto Public Health Postpartum Depression Advisory Committee, Toronto, Ontario

Table of Contents

Summary of Recommendations	10
Interpretation of Evidence	11
Responsibility for Development	12
Purpose & Scope	12
Development Process	14
Background Context	15
Limitations of the Evidence	18
Practice Recommendations	20
Education Recommendations	36
Organization & Policy Recommendations	37
Research Gaps & Implications	40
Evaluation/Monitoring of Guideline	42
Implementation Strategies	44
Process for Update/Review of Best Practice Guideline	45
References	46
Bibliography	55

Appendix A: Glossary of Terms	64
Appendix B: Search Strategy for Existing Evidence.....	69
Appendix C: Diagnostic and Statistical Manual of Mental Disorders (DSM) and Depressive Symptoms Description	72
Appendix D: Edinburgh Postnatal Depression Scale.....	73
Appendix E: Échelle des dépression postpartum d'edinburgh	74
Appendix F: Administration and Interpretation of the Edinburgh Postnatal Depression Scale	75
Appendix G: Table of EPDS Cut-off Scores	76
Appendix H: Suicidal Ideation Resource Sheet	78
Appendix I: Other Risk Factors Resource Sheet.....	79
Appendix J: Depression and Anxiety After Childbirth Resource Sheet	80
Appendix K: Sample Care Pathway	82
Appendix L: Additional Resources	83
Appendix M: Description of the Toolkit	86

Summary of Recommendations

RECOMMENDATION		*LEVEL OF EVIDENCE
Practice Recommendations		
Prevention	1.0 Nurses provide individualized, flexible postpartum care based on the identification of depressive symptoms and maternal preference.	Ia
	2.0 Nurses initiate preventive strategies in the early postpartum period.	Ia
Confirming Depressive Symptoms	3.0 The Edinburgh Postnatal Depression Scale (EPDS) is the recommended self-report tool to confirm depressive symptoms in postpartum mothers.	III
	4.0 The EPDS can be administered anytime throughout the postpartum period (birth to 12 months) to confirm depressive symptoms.	III
	5.0 Nurses encourage postpartum mothers to complete the EPDS by themselves in privacy.	III
	6.0 An EPDS cut-off score greater than 12 may be used to determine depressive symptoms among English-speaking women in the postpartum period. This cut-off criterion should be interpreted cautiously with mothers who: 1) are non-English speaking; 2) use English as a second language, and/or 3) are from diverse cultures.	III
	7.0 The EPDS must be interpreted in combination with clinical judgment to confirm postpartum mothers with depressive symptoms.	III
	8.0 Nurses should provide immediate assessment for self harm ideation/behaviour when a mother scores positive (e.g., from 1 to 3) on the EPDS self-harm item number 10.	IV
Treatment	9.0 Nurses provide supportive weekly interactions and ongoing assessment focusing on mental health needs of postpartum mothers experiencing depressive symptoms.	Ib
	10.0 Nurses facilitate opportunities for the provision of peer support for postpartum mothers with depressive symptoms.	IIb
General	11.0 Nurses facilitate the involvement of partners and family members in the provision of care for postpartum mothers experiencing depressive symptoms, as appropriate.	Ib
	12.0 Nurses promote self-care activities among new mothers to assist in alleviating depressive symptoms during the postpartum period.	IV
	13.0 Nurses consult appropriate resources for current and accurate information before educating mothers with depressive symptoms about psychotropic medications.	IV
Education Recommendations		
	14.0 Nurses providing care to new mothers should receive education on postpartum depression to assist with the confirmation of depressive symptoms and prevention and treatment interventions.	III

*Please refer to page 11 for details regarding “Interpretation of Evidence”.

RECOMMENDATION		LEVEL OF EVIDENCE
Organization & Policy Recommendations		
	15.0 Practice settings establish local care pathways and protocols to guide practice and to ensure postpartum mothers with depressive symptoms have access to safe and effective treatment.	III
	16.0 Practice settings provide orientation and continuing education related to the care of postpartum mothers experiencing depressive symptoms.	IV
	17.0 Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes: <ul style="list-style-type: none"> ■ An assessment of organizational readiness and barriers to education. ■ Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process. ■ Dedication of a qualified individual to provide the support needed for the education and implementation process. ■ Ongoing opportunities for discussion and education to reinforce the importance of best practices. ■ Opportunities for reflection on personal and organizational experience in implementing guidelines. <p>In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the <i>Toolkit: Implementation of Clinical Practice Guidelines</i> based on available evidence, theoretical perspectives and consensus. The <i>Toolkit</i> is recommended for guiding the implementation of the RNAO guideline <i>Interventions for Postpartum Depression</i>.</p>	IV

Interpretation of Evidence

Levels of Evidence

- Ia** Evidence obtained from meta-analysis or systematic review of randomized controlled trials.
- Ib** Evidence obtained from at least one well-designed randomized controlled trial.
- IIa** Evidence obtained from at least one well-designed controlled study without randomization.
- IIb** Evidence obtained from at least one other type of well-designed quasi-experimental study without randomization.
- III** Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.
- IV** Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

Responsibility for Development

The Registered Nurses' Association of Ontario (RNAO), with funding from the Government of Ontario, has embarked on a multi-year project of nursing best practice guideline development, pilot implementation, evaluation and dissemination. This guideline was developed by a multidisciplinary panel convened by the RNAO, conducting its work independent of any bias or influence from the Government of Ontario.

Purpose & Scope

Best practice guidelines (BPG) are systematically developed statements to assist practitioners' and clients' decisions about appropriate health care (Field & Lohr, 1990). The focus of this guideline is on the confirmation, prevention, and treatment of mothers with depressive symptoms in the first postpartum year. This guideline will benefit community, family practice, and hospital-based nurses, as well as other health professionals caring for postpartum women. Specific Practice Recommendations relate to the confirmation of mothers with depressive symptoms and include implementation of effective preventive and non-pharmacological treatment interventions. Education Recommendations are suggested to support clinical practice in the care of mothers experiencing depressive symptoms in the postpartum period. Finally, Organization and Policy Recommendations have been developed to address the importance of a supportive practice environment that enables the provision of effective care and includes strategies for ongoing evaluation of guideline implementation.

It is acknowledged that the individual competencies of nurses vary, across categories of nursing professionals, and depends upon their scope of practice. Knowledge, skills, attitudes, critical analysis and decision making are enhanced over time through education and experience. It is expected that individual nurses will perform only those assessments and interventions for which they have the appropriate knowledge and skill set. Furthermore, it is imperative that nursing professionals seek appropriate consultation in instances where the mother's care needs require a multidisciplinary approach. It is also important to note that a diagnosis of postpartum depression can only be established by a clinical diagnostic interview completed by a trained mental health specialist. This guideline has been conceptualized within the scope of nursing practice. As the etiology of postpartum depression is multifactorial, diverse interventions provided by other health professionals may also be required. As such, it is acknowledged that effective healthcare depends on a coordinated interdisciplinary approach incorporating ongoing communication between health professionals and mothers while including maternal preferences and needs. Furthermore, postpartum care in Ontario varies across geographical locations and the provider of services. Currently, women who have given birth vaginally are typically discharged from hospital within 48-hours of delivery. Due to shorter length of stay, much of the responsibility of care in the postpartum period is delivered by community health providers in a variety of settings (e.g., clinics, family practice, community facilities, and client's home) (Watt, Sword, Krueger & Sheehan, 2002).

Screening

Currently, the link between postpartum depression screening and the receipt of effective treatment has not been clearly demonstrated (Dennis, 2003a; Ross, Dennis, Robertson & Stewart, 2005). In the general depression (non-postpartum) literature, a systematic review (Pignone et al., 2002) reported several studies which found screening *did not* lead to a significant increase in the number of patients treated for depression (Dowrick, 1995; Linn & Yager, 1980; Williams et al., 1999). Another study in this systematic review noted that screening increased the number of antidepressant prescriptions but not the number of referrals for counselling or psychiatric care (Callahan et al., 1994); one study found screening lead to only a 10% increase in appropriate treatment (Wells et al., 2000). These results suggest that the link between depression screening and the receipt of appropriate treatment is not strong or consistent. More research specifically related to depression in postpartum women is needed.

Similar to the receipt of appropriate treatment, the link between postpartum depression screening and an increase in the number of mothers who recover from postpartum depression has not been clearly demonstrated (Dennis, 2003a; Ross et al., 2005). In the literature about general depression, the effect of screening on recovery from depression is highly variable. In a review examining screening for depression in adults (Pignone et al., 2002), two small trials found that screening produced a significant decrease in the number of patients experiencing major depression at a later time (Johnstone & Goldberg, 1976; Zung & King, 1983). However, two larger trials found screening lead to only moderate improvements in depression remission (Wells et al., 2000; Williams et al., 1999) and four other studies found small or no improvements in the number of patients experiencing depressive symptoms at a later time (Callahan, Dittus & Tierney, 1996; Callahan et al., 1994; Reifler, Kessler, Bernhard, Leon & Martin, 1996; Whooley, Stone & Soghikian, 2000). The overall results suggest only a weak link between screening and increased remission rates from depression.

In summary, no research studies to date have investigated the extent to which postpartum depression screening will ultimately improve the mental health of postpartum women. Research on men and women with depression outside of the postpartum period has shown limited results so far: screening has not consistently increased either the number of patients who are given treatment for depression or the number of patients who go on to recover from their depression. Given these findings, **postpartum depression screening will not be addressed in this best practice guideline**. In addition, although it is acknowledged that **antenatal depression** is also frequently experienced by many pregnant women, it requires a separate review and evaluation of evidence.

Given this scope, the clinical questions addressed by this guideline are:

- 1) How can nurses accurately confirm depressive symptoms in postpartum women?
- 2) What effective prevention interventions can nurses implement in practice?
- 3) What effective treatment interventions can nurses implement in practice?

Glossary of Terms used in this document can be found in *Appendix A*.

Development Process

In June of 2004, a multidisciplinary panel with expertise in practice, education and research from hospital, community, and academic settings was convened under the auspices of the RNAO. At the outset, the panel established the scope of the guideline through a process of discussion and consensus. It was decided to focus on the confirmation of depressive symptoms among postpartum women and the implementation of effective prevention and treatment interventions.

Through a structured literature search, guidelines related to postpartum depression were identified. Details of this search are described in *Appendix B*.

These guidelines were reviewed according to the following screening criteria:

1. published in English;
2. dated no earlier than 1999;
3. the primary focus was postpartum depression;
4. evidence-based; and
5. accessible for retrieval.

The following guidelines were identified for critical appraisal:

British Columbia Reproductive Care Program (2003). Reproductive mental illness during the perinatal period. British Columbia Care Program [Electronic version]. Available: <http://www.rcp.gov/bc.ca>

Scottish Intercollegiate Guidelines Network (2002). Postnatal depression and puerperal psychosis. Scottish Intercollegiate Guidelines Network [Electronic version]. Available: <http://www.sign.ac.uk/pdf/sign60.pdf>

The guidelines were critically appraised with the intent of identifying existing guidelines that were current, developed with rigour, evidence-based and addressed the scope identified by the best practice guideline panel. A quality appraisal was conducted using the Appraisal of Guidelines for Research and Evaluation (AGREE) Instrument (AGREE Collaboration, 2001). This process yielded a decision that the available guidelines were insufficient in addressing the particular scope of this guideline.

Following the review of these identified guidelines, a search for existing literature on the identified clinical questions was conducted, details of which are found in *Appendix B*. A Master's prepared nurse with expertise in critical appraisal, completed a preliminary quality appraisal of the literature for each delineated question. With guidance by the Team Leader, the panel members then divided into subgroups to address one question and the preliminary critical appraisal was used to focus the literature review. Based on the evidence available, draft recommendations were developed. The development panel as a whole reviewed the recommendations and through discussion and consensus, presented a draft guideline.

This draft was distributed to external stakeholders for review. As noted in the acknowledgment section, the stakeholders represented various healthcare professionals as well as clients. External stakeholders were provided with specific questions for comment, as well as the opportunity to give overall feedback and general impressions. The results were compiled and reviewed by the development panel – further discussion and consensus resulted in revisions to the draft document prior to publication.

Background Context

The postpartum period is considered a time of increased risk for the onset of mood disorders. Research has shown that a woman is significantly more likely to be admitted to a psychiatric hospital within the first 4 weeks postpartum than at any other time in her life (Kendell, Chambers & Platz, 1987; Paffenbarger, 1982; Brockington, Cernick, Schofield, Downing, Francis & Keelan, 1981) and up to 12.5% of all psychiatric hospital admissions of women occur during the postpartum period (Duffy, 1983). Postpartum affective disorders are typically divided into three categories: postpartum blues, postpartum depression, and puerperal psychosis. Postpartum blues is the most common postpartum mood disturbance with prevalence estimates ranging from 30% to 75%. Symptoms, which often begin within the immediate postpartum period and remit within days, include mood lability, irritability, tearfulness, generalized anxiety, and sleep and appetite disturbance. By definition, postpartum blues are transient, mild, time-limited, and do not require treatment other than reassurance (Kennerly & Gath, 1989). Conversely, postpartum psychosis is a very severe depressive episode characterized by the presence of psychotic features. This condition is the most severe and uncommon form of postpartum affective disorders, with rates of 1 to 2 episodes per 1000 deliveries (Kendell et al., 1987). The clinical onset is rapid, with symptoms presenting as early as the first 48 to 72 hours postpartum, and the majority of episodes develop within the first 2 weeks postpartum. The symptoms are typically depressed or elated mood (which can fluctuate rapidly), disorganized behaviour, mood lability, delusions, and hallucinations (Brockington et al., 1981).

Among these conditions is postpartum depression, a nonpsychotic depressive episode beginning in the postpartum period (Cox, Murray & Chapman, 1993; O'Hara, 1994; Watson, Elliott, Rugg & Brough, 1984). At present, postpartum depression is not classified as a separate disease; it is diagnosed as part of affective or mood disorders in both the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and the World Health Organization's International Classification of Diseases (ICD-10). According to the DSM-IV, postpartum depression is a depressive disorder with onset within the first 4 weeks postpartum. However to be comprehensive in the literature review and to be able to include the best evidence possible, for this practice guideline, postpartum depression is defined as any depressive episode that occurs within the first year postpartum.

The symptoms of postpartum depression are similar to depression unrelated to childbirth (Wisner, Parry & Piontek, 2002). However, despite these similarities, postpartum depression is frequently exacerbated by other indicators such as low self-esteem, inability to cope, loneliness, feelings of incompetence, and loss of self (Beck, Reynolds & Rutowski, 1992; Mills, Finchilescu & Lea, 1995; Righetti-Veltema, Conne-Perreard, Bousquet & Manzano, 1998; Ritter, Hobfoll, Lavin, Cameron & Hulsizer, 2000). Somatic symptoms of depression, including appetite and sleep disturbances, are often present in women with postpartum depression (Nonacs, & Cohen, 1998). Distinguishing between these depressive symptoms and the supposed 'normal' sequelae of childbirth can make postpartum depression potentially difficult to diagnose (Hostetter & Stowe, 2002). See *Appendix C* for the DSM-IV criteria for a major depressive episode.

Postpartum depression is a major health issue for many women (Affonso, De, Horowitz & Mayberry, 2000). A meta-analysis of 59 studies suggests that approximately 13% of women experience postpartum depression (O'Hara & Swain, 1996) with the inception rate greatest in the first 12 weeks postpartum (Goodman, 2004); these rates do not differ between primiparous and multiparous mothers. While up to 20% of women with

postpartum blues will continue to develop postpartum depression (Campbell, Cohn, Flanagan, Popper & Meyers, 1992; O'Hara, Schlechte, Lewis & Wright, 1991b), other women enjoy a period of well-being after delivery followed by a gradual onset of depressive symptoms.

This hidden morbidity has well documented health consequences for the mother, child, and family. While women who have suffered from postpartum depression are twice as likely to experience future episodes of depression over a 5-year period (Cooper & Murray, 1995), infants and children are particularly vulnerable. Untreated postpartum depression can cause impaired maternal-infant interactions (Murray, Fiori-Cowley, Hooper & Cooper, 1996) and negative perceptions of infant behaviour (Mayberry & Affonso, 1993) which have been linked to attachment insecurity (Hipwell, Goossens, Melhuish, & Kumar, 2000; Murray, 1992), and emotional developmental delay (Cogill, Caplan, Alexandra, Robson & Kumar, 1986; Cummings & Davies, 1994; Hipwell et al., 2000; Murray, Sinclair, Cooper, Ducournau, Turner & Stein, 1999; Whiffen & Gotlib, 1989). Marital stress, resulting in separation or divorce (Boyce, 1994; Holden, 1991) is also a reported outcome.

The cause of postpartum depression remains unclear (Cooper & Murray, 1998), with extensive research suggesting a multifactorial aetiology (Ross, Gilbert Evans, Sellers & Romach, 2003). In particular, a variety of biological, psychological, and sociocultural variables likely interact to produce vulnerability to postpartum depression, and the causes or “triggers” of postpartum depression likely vary from woman to woman. Although researchers and health professionals have long speculated that postpartum depression may be linked to the dramatic hormone changes which accompany pregnancy and childbirth, to date no particular hormone has been consistently associated with postpartum depression, nor have any differences in hormones been identified between women with and without postpartum depression (Bloch et al., 2000).

To promote the identification of women experiencing postpartum depression, self-report measures have been developed specifically for use within a postpartum population. Self-report measures are easier and less costly to administer, and do not require the presence of trained specialists. The most well established self-report tool for the identification of postpartum depression is the Edinburgh Postnatal Depression Scale (EPDS), a 10 item self-report measure that has been translated into diverse languages. The EPDS has been rigorously validated against clinical diagnostic interviews (Cox, Holden & Sagovsky, 1987). English- and French-language versions of the EPDS are provided in *Appendices D & E*.

According to epidemiological studies and meta-analyses of predictive studies, the strongest predictors of postpartum depression are: antenatal depression and anxiety, personal and family history of depression, life stress (Beck, 2001; Bernazzani, Saucier, David & Borgeat, 1997; O'Hara & Swain, 1996; O'Hara, Schlechte, Lewis & Varner, 1991a), and the lack of social support (Beck, 2001; Brugha, Sharp, Cooper, Weisender, Britto & Shinkwin, 1998; Cooper & Murray, 1998; Mills et al., 1995; O'Hara & Swain, 1996; O'Hara et al., 1991a; Righetti-Veltema et al., 1998). Two meta-analyses also found a higher risk of postpartum depression among socially disadvantaged women (Beck, 2001; O'Hara & Swain, 1996).

To enhance our understanding of postpartum depression, numerous qualitative research studies have been conducted. To summarize this work, a meta-synthesis of 18 qualitative studies was conducted which identified several overarching themes including: 1) incongruity between expectations and reality of motherhood; 2) spiralling downward; and 3) pervasive loss (Beck, 2002).

Eight of the 18 studies in the meta-synthesis centred on the role that conflicting expectations and experiences of motherhood played in the development of postpartum depression. In particular, women often held unrealistic expectations which were inconsistent with their own experiences as mothers (Mauthner, 1999). This incongruity between expectations and lived experience was described in seven areas: labour and delivery, life with their infants, self as mother, relationship with partners, support from family and friends, life events and physical changes (Berggren-Clive, 1998). When women became disillusioned with motherhood and perceived they had failed to be the 'perfect mother' (Berggren-Clive, 1998), their emotions of despair and sadness started a spiral downward into postpartum depression.

Loss of control was identified as a central theme in 15 out of the 18 studies. Nicolson's (1999) study described how loss of autonomy and time were precursors to feeling out of control due to a lack of time to consider themselves or process their daily experiences. This in turn led to a loss of self-identity, including loss of former sense of self. Women also discussed how postpartum depression led to loss of relationships with their partners, children, and family members (Morgan, Matthey, Barnett & Richardson, 1997). Some women wanted their partners 'to be able to read their minds' and take some initiative in helping them, while others felt that admitting their feelings was a sign of personal inadequacy and failure as a mother (McIntosh, 1993). If they did admit to their feelings, women also risked being misunderstood, rejected, or stigmatized by their loved ones. Women with postpartum depression expressed feelings of being 'different' and 'abnormal' compared to other mothers. They consistently talked about a profound sense of isolation and loneliness. Mothers who were depressed frequently felt discomfort with being around others and believed that no one really understood what they were experiencing (Beck et al., 1992). Consequently, they socially withdrew to escape a potentially critical world (Semprevivo, 1996).

Although qualitative research cannot determine intervention effectiveness, it can provide valuable information such as determining which aspects of care women find most useful. In a variety of studies, mothers who were interviewed have identified the need for health professionals to be aware of and knowledgeable about postpartum depression (Mauthner, 1997). Community education to inform family members about the range of signs and symptoms of postpartum depression was also thought to be beneficial (Ugarizza, 2002). Mothers felt that postpartum depression should be openly discussed in antenatal classes so that women could be better informed. It was thought that this type of discussion may also help to reduce the stigma associated with postpartum depression. In addition, women felt antenatal classes provided an opportunity to develop social support networks (Mauthner, 1997). Mothers also identified 'talking therapies' as an option that should be made available (Chan, Levy, Chung & Lee, 2002). Health professionals who encouraged women to talk about their feelings and who spent time listening were highly valued (Mauthner, 1997). Telephone and web-based support groups have been suggested to assist mothers who are symptomatic in their homes (Ugarizza, 2002). Among ethnospecific populations, mothers felt nurses could foster connections with specific cultural groups by becoming aware of what was available in the community (Nahas, Hillege & Amasheh, 1999). There was also a stated need that nurses understand the cultural beliefs and values of new mothers in order to facilitate culturally sensitive care (Chan et al., 2002; Nahas et al., 1999; Nahas & Amasheh, 1999).

Limitations of the Evidence

Research Limitations

The study of postpartum depression presents many special methodological complexities that need to be considered if scientific knowledge is to progress (Dennis 2003a; 2004a). First, there are particular difficulties in defining which target group should be studied. Diagnosis is much less concrete than in other areas where an initial assessment can be confirmed by objective measures such as laboratory tests. Second, many of the interventions evaluated are difficult to clearly define as psychological and psychosocial strategies often involve talking and modifying the environment. Accurately replicating such treatment is challenging. Third, the nature of the interventions employed frequently include co-interventions. For example, in addition to receiving a psychosocial intervention many study participants were also treated with antidepressant medication. Consequently, it is difficult to discern which treatment option was effective if a beneficial effect was found. Fourth, there are difficulties in establishing the relative costs and benefits of treatment, arising from the relapsing/remitting nature of postpartum depression. Finally, the context of postpartum depression research is crucial and the social, cultural, and organizational environment in which postpartum depression services takes place is highly variable. For example, the same intervention can have differing effects depending on context and variations in the control group.

Many of the dilemmas with postpartum depression research begin from the way in which interventions are evaluated (Dennis 2003a; 2004a). Of the recent prevention and treatment trials conducted, most were small with a mean sample size of approximately 43 women. A sample size of 300 would be more suitable to detect clinically significant changes in depressive symptoms. There were also high attrition rates, especially with group interventions. Examination of the wider economic impact of postpartum depression was rarely evaluated and impossible to complete post hoc due to small sample sizes. Finally, many interventions were provided by a health care professional other than a nurse, therefore limiting study applicability. These identified limitations significantly impact the quality of evidence available to guide best practice guidelines.

Diversity Among Research Participants

Postpartum depression research has mainly been confined to developed countries, mainly Western Europe and North America (Kumar, 1994). It is important to note that while some limited research has been conducted to determine the prevalence of and risk factors for postpartum depression in less developed countries, the research addressing culturally diverse, immigrant populations is lacking. This is a serious limitation considering that childbirth and the postpartum period are conceptualized and experienced differently among diverse cultures (Kumar, 1994). While Stern & Kruckman (1983) suggested that an anthropological literature review revealed little evidence that postpartum depression existed outside Western society, international studies have found comparable rates across cultures (Affonso et al., 2000). For example, in a study conducted in Africa, Ugandan mothers were just as likely to experience postpartum depression as Scottish women (Cox, 1983). Corresponding prevalence rates have also been found in Chilean women (Jadresic, Araya & Jara, 1995). Research also suggests that the meaning and context of postpartum depression varies across cultures. For example, some studies have identified culturally-specific risk factors for postpartum depression, including the sex of the infant in women in India and Hong Kong (Lee et al., 2002; Rodrigues, Patel, Jaswal & de Souza, 2003). Therefore, caution must be used in applying the interventions described in this guideline with culturally diverse women, and additional research in this area is needed.

Similar to the lack of research regarding postpartum depression in culturally diverse populations, there have been few studies addressing interventions for other diverse populations of women with postpartum depression. These include, but are not limited to, women living in rural and remote communities, Aboriginal women, adolescent and single mothers, lesbian and bisexual mothers, adoptive mothers, and mothers with disabilities. Additional research is needed to ensure that the interventions discussed in this guideline are equally effective for diverse populations of women.

Types of Evidence Used

In developing this best practice guideline, the development panel strove to use the best available research evidence. In evaluating preventive and treatment interventions, randomized controlled trials (RCTs) were considered the best quality of evidence with which to evaluate whether or not an intervention effectively prevented or reduced symptoms of postpartum depression. However, RCTs often yield no information about whether or not mothers liked an intervention or perceived it to be beneficial. Similarly, without an economic evaluation, RCTs give no indication of whether or not implementation of the intervention will be feasible in any given healthcare setting. In response to these issues, the guideline development panel also incorporated anecdotal evidence based on the clinical experience of the development panel, as well as qualitative research, where available. Future research evaluating interventions for postpartum depression should include assessment of both mothers' perspectives and the economic impact of the intervention (Dennis & Creedy, 2004).



Practice Recommendations

Prevention

Recommendation 1.0

Nurses provide individualized, flexible postpartum care based on the identification of depressive symptoms and maternal preference. *(Level of Evidence = Ia)*

Discussion of Evidence

A Cochrane systematic review evaluating the effect of psychosocial and psychological interventions for the prevention of postpartum depression was conducted by Dennis & Creedy (2004) and included 15 trials incorporating 7697 women. A meta-analysis in this Cochrane review that pooled the results of two trials suggested that flexible, supportive home visits provided by a health professional postnatally is a promising intervention that may have a preventive effect (Relative Risk = 0.68, 95% Confidence Interval = 0.55 to 0.84). No preventive effect was found with the following interventions: antenatal and postnatal classes, lay home visits, early postpartum follow-up by family physicians, midwifery-led debriefing, or continuity of care provided by midwives, (Dennis & Creedy, 2004). These findings are supported by another meta-analysis of randomized trials designed to reduce postpartum depression (Lumley, Austin & Mitchell, 2004).

One of the two studies included in the Cochrane meta-analysis was the MacArthur (2002) trial which was conducted in the United Kingdom (UK). In this well-conducted randomized controlled trial designed to assess community postpartum care that was reorganized to identify and manage individual needs, 36 general practice clusters were randomly allocated to either an intervention (n = 17) or control (n = 19) group. Of the 2064 participating women, 1087 (53%) were in practices randomly assigned to the intervention group and 977 (47%) were in practices assigned to the control group. The intervention in this trial was extended midwifery care where the usual 7 home visits in the first 2 weeks postpartum were delivered so that the final home visit took place at approximately 4 weeks postpartum. Midwives made an average of 6 visits per client with a range of 1-17 visits. Women completed a symptom checklist at the first visit and at 10 and 28 days postpartum. Ten evidence-based guidelines for assessment and referral were developed to assist in interpreting the results of the symptom checklist. Women in the control group received standard care that consisted of 7 midwifery home visits to 10 to 14 days postpartum with care thereafter from health visitors, with general practitioners completing routine home visits and a final 6 to 8 week check-up. Significant group differences were found with 14.4% of mothers in the intervention group scoring above 12 on the EPDS in comparison to 21.3% of mothers in the control group ($p = 0.01$). The numerous strengths of this secondary preventive trial suggest that delivering care so that it is flexible and tailored to individual needs may help to improve women's mental health outcomes.

The other study included in the Cochrane review was the Armstrong study (1999; 2000). This Australian randomized controlled trial targeted families where the child was at greater risk of poor health and developmental outcomes due to risk factors such as violence, single parenthood, ambivalence about pregnancy, no antenatal care, financial stress, and unstable housing (n = 181) and evaluated the effect of extensive nursing home visits on diverse outcomes including depressive symptoms at 6 and 16 weeks postpartum. Women were recruited in the immediate postpartum period based on self-reported vulnerability factors and randomly allocated to receive either a structured program of nurse home visiting

(n = 90), or standard community child health services (control group; n = 91). Mothers in the intervention group received nursing home visits weekly to 6 weeks postpartum, and then every 2 weeks to 12 weeks postpartum and then monthly to 24 weeks postpartum. During these home visits the nurses were to establish a relationship of trust with the family; enhance parenting self-esteem and confidence; provide anticipatory guidance for normal child development problems such as crying or variations in sleep behaviour; promote preventive child health care; and facilitate access to appropriate community services. Mothers who received the intervention had lower EPDS scores at 6 weeks postpartum than mothers in the control group with only 5.8% scoring above 12 on the EPDS in comparison to 20.7% of mothers in the control group. At the 16-week follow-up, 160 families (80 intervention, 80 control) were available for assessment and the earlier difference in EPDS scores was not maintained. The researchers of this primary preventive trial suggested that provision of weekly visits might enable the initial positive impact to be maintained to 24 weeks postpartum.

Recommendation 2.0

Nurses initiate preventive strategies in the early postpartum period.

(Level of Evidence = Ia)

Discussion of Evidence

Research has demonstrated that maternal mood in the immediate postpartum period (or up to 2 weeks postpartum) is a significant predictor of postpartum depression. Hannah, Adams, Lee, Glover & Sandle (1992) assessed the depressive symptoms of 217 mothers living in the UK at 5 days and 6 weeks postpartum. Using the EPDS, there was a positive significant relationship between mothers who received a high EPDS score at 5 days and at 12 weeks. Mothers with an EPDS score of greater than 9 at 5 days were 8 times more likely to score above 9 at 6 weeks. A history of postpartum depression and an EPDS score above 12 at five days postpartum, heightened the risk of postpartum depression at 6 weeks by 85-fold. Such findings are supported by other studies involving mothers of different ethnic orientations: Japanese (Yamashita, Yoshida, Nakano & Tashiro, 2000), Irish (Lane, Keville, Morris, Kinsella, Turner & Barry, 1997) and Canadian (Dennis, 2004b). Dennis' (2004b) study involved administering the EPDS at one, 4 and 8 weeks to 594 Canadian mothers. The high EPDS score at one week was significantly related to the scores at 4 and 8 weeks. In other words, mothers with a high EPDS score at 7 days postpartum were at higher risk to have depressive symptoms at one and two months. In Beck's (2002) meta-analysis, the relationship between postpartum blues and postpartum depression was considered to have a moderate effect. As such the early onset depression suggests the importance of implementing secondary preventive strategies such as referral or support to minimize the impact of symptoms on her ability to nurture her newborn child (Beck et al., 1992; Harris, 1994; Holden, 1996).

In spite of the emerging profile of risk factors that may predispose a woman to the development of postpartum depression (Beck, 2001; O'Hara & Swain, 1996), there is little evidence supporting the effectiveness of antenatal interventions on preventing postpartum depression. Stamp, Williams & Crowther (1995) hypothesized that women identified as vulnerable to postpartum depression would benefit from two additional, specially tailored educational antenatal, and one postnatal classes. In this study, of the 249 women screened by a measure developed by Stamp and colleagues (1995), 144 (58%) were identified as at risk to postpartum depression and were randomly assigned to the prevention (n = 73) or standard care (n = 71) groups. There were no differences in the EPDS scores between the 2 groups at any of the follow-up times.

Interventions for Postpartum Depression

In another study, Brugha et al., (2000) identified 400 prenatal primiparous women for depression using the General Health Questionnaire. Of these women, 209 were randomly assigned to additional psychosocial support classes (n = 103) or routine care (n = 106). At three months postpartum, there were no differences between the groups in terms of depressive symptoms. In both the above mentioned studies, the researchers suggest that poor attendance at classes may account for the lack of difference in outcomes.

Several authors reviewed the research about interventions in the prenatal period designed to prevent postpartum depression (Austin & Lumley 2003; Dennis, 2004b; Lumley et al., 2004; Ogrodniczuk & Piper, 2003). All of them concluded that there is insufficient evidence supporting the preventive effect of antenatal interventions for women identified as vulnerable to depression. As highlighted by these researchers, many of the antenatal prevention studies had significant methodological limitations such as heterogeneous samples, the screening measures for depression, small sample sizes and high attrition rates. Further research in this area is needed.

To further support this finding, the Cochrane systematic review completed by Dennis & Creedy (2004) found studies in which the intervention began prenatally and continued postnatally failed to reduce the likelihood of women developing postpartum depression (4 trials, n = 1283; RR = 1.12, 95% CI = .93 to 1.59). However, a preventative effect was found for those trials evaluating a postpartum-only intervention (10 trials, n = 6379; RR = 0.76, CI = .58 to .98). It is noteworthy that this Cochrane systematic review also suggested that trials selecting participants based on 'at risk' criteria has more success in preventing postpartum depression (7 trials, n = 1162; RR = 0.67, 95% CI = .51 to .89) than those that enrolled women from the general population (8 trials, n = 6535; RR = .87, 95% CI = .66 to 1.16).

Confirming Depressive Symptoms

Recommendation 3.0

The Edinburgh Postnatal Depression Scale (EPDS) is the recommended self-report tool to confirm depressive symptoms in postpartum mothers.

(Level of Evidence = III)

Discussion of Evidence

The Edinburgh Postnatal Depression Scale (EPDS) has been shown to reliably identify women with depressive symptoms. In the original validation study of the EPDS with 84 participants (Cox et al., 1987), the measure had a sensitivity (proportion of women correctly classified as suffering from a depressive disorder) of 86%, a specificity (proportion of women correctly classified as not experiencing depression) of 78%, and a positive predictive value (percentage of women who score in the depressed range on the scale who are diagnosed as depressed) of 78%. Subsequent studies have also noted similar sensitivity and specificity estimates (Boyce, Stubbs & Todd, 1993; Harris, Huckle, Thomas, Johns & Fung, 1989), however a review of 18 studies validating the EPDS found differences in study design limited the comparability between estimates (Eberhard-Gran, Eskild, Tambs, Opjordsmoen & Samuelsen, 2001).

The EPDS has also been compared with other self-report measures to determine if it is indeed the most effective instrument in identifying postpartum mothers with depressive symptoms. In a study conducted in the United Kingdom, 147 mothers were screened for major depression at 6 to 8 weeks postpartum. Using

predetermined cut-off points, the EPDS and Beck Depression Inventory (BDI) were compared in their abilities to identify the 15% of mothers who were diagnosed with major depression according to DSM-IV criteria (Harris et al., 1989). The sensitivity of the EPDS was 95% and its specificity 93%. The performance of the BDI was markedly inferior, with a sensitivity of 68% and specificity of 88%. Similarly, the results of a study looking into the association between thyroid status and postpartum depression were re-analysed to explore the properties of the rating scales employed (Thompson, Harris, Lazarus & Richards, 1998). The performance of the EPDS was found to be superior to that of the Hospital Anxiety and Depression Scale (HADS) in identifying clinical depression and on par with the observer-rated Hamilton Rating Scale for Depression (HRSD). The Postpartum Depression Screening Scale (PDSS), a 35-question likert scale, also has demonstrated positive results in identifying women with postpartum depression (Beck & Gable, 2000). In a validation study by Beck & Gable (2001), the sensitivity and specificity were reported above or similar to that of the EPDS dependent upon the cut-off scores used. Further independent psychometric testing of the PDSS is warranted to further assess the validity of the PDSS before any recommendations can be made regarding its use.

It is noteworthy that in a recently published EPDS book, Cox & Holden (2003) suggested that the main use of the EPDS in clinical practice is to assist health professionals in identifying women that may be suffering from depression in the postpartum period in a timely manner so that interventions may be initiated to prevent the escalation of the severity of depression. Another advantage of the EPDS is that, unlike other depression rating scales, it does not ask about somatic symptoms such as insomnia and appetite changes that affect almost all new mothers during the postpartum period. Only one item on the EPDS addresses a somatic symptom: "I have been so unhappy that I have had difficulty in sleeping." However, a recent study suggests that the lack of questions about somatic symptoms on the EPDS may also be a disadvantage, as there appears to be a subgroup of women with postpartum depression who present primarily with physical or somatic complaints rather than psychological symptoms (Ross et al., 2003). Despite this potential limitation, the EPDS is an internationally recognized tool that has been translated into over 23 languages by diverse researchers from various disciplines. These researchers have consistently found the EPDS to be: (1) convenient to administer (requires little time or special training and can even be done via telephone); (2) inoffensive to women (high acceptability in diverse cultures); (3) readily incorporated into everyday clinical practice; and (4) widely available at no cost (Dennis, 2003a).



Recommendation 4.0

The EPDS can be administered anytime throughout the postpartum period (birth to 12 months) to confirm depressive symptoms. *(Level of Evidence = III)*

Discussion of Evidence

A recent review suggested that for the majority of women, onset of postpartum depression usually occurs within the first few weeks or months after delivery; however, for some women the inception of depressive symptoms was after several months postpartum (Goodman, 2004). In a two-stage screening procedure using the EPDS and a standardized psychiatric interview, the rate of depression among women during the 5 weeks postpartum was 3 times higher than the rate of depression among non-postpartum women (Cox et al., 1993). Research also suggests that in 71% of affected women, the depression originated within the first 4 weeks postpartum; and for 5.3% of women, depression began after 12 weeks postpartum (McIntosh, 1993). In an Australian study (Small, Brown, Lumley & Astbury, 1994), almost 50% of affected women began feeling depressed within 12 weeks postpartum, and approximately one-third indicated that their depression had a later onset. In a UK study, nearly half of the women identified with depressive symptoms had an onset within 12 weeks postpartum (Cooper, Campbell, Day, Kennerley & Bond, 1988). However, the researchers also found that another 25% of women had an onset of depression between 6 and 12 months postpartum.

Onset of depression was reported at later postpartum times in three additional studies (Areias, Kumar, Barros & Figueiredo, 1996; Lundh & Gyllang, 1993; Stuart, Couser, Schilder, O'Hara & Gorman, 1998). These research results demonstrate that the confirmation of depressive symptoms may occur across the postpartum period, and therefore it is recommended that the EPDS may be administered at any time, or repeated at any time in the first 12 months postpartum, in order to confirm suspected depressive symptoms.

It is important to note that there is no research specifying exactly when in the postpartum period the EPDS should be administered and it is unlikely that there is a “critical” time to use the EPDS with new mothers. Further research is also required to examine the validity of the EPDS when used repeatedly with the same mother and whether the sensitivity and specificity is equivalent across the postpartum period.

Recommendation 5.0

Nurses encourage postpartum mothers to complete the EPDS tool by themselves in privacy.

(Level of Evidence = III)

Discussion of Evidence

Diverse researchers have clearly suggested that EPDS scores are more accurate when completed alone, without other family members or a third party present (Clifford, Day, Cox & Werrett, 1999; Cox & Holden, 2003). Nurses can administer the EPDS either face-face with the mother or over the telephone. Included in *Appendix E* are some sample lead-in questions to assist mothers to answer the questions on the EPDS as honestly as possible. Mothers should be encouraged to complete all items on the EPDS, underlining the response that best describes her feelings during the last week. The EPDS can be administered anytime from birth to 52 weeks and can be administered more than once during this period to compare changes in the score.

In situations of limited reading skills or English language ability, nurses may assist the mother in completing the EPDS by underlining the response that best describe the mother's feeling in the past week by involving an interpreter, and/or utilizing an appropriate translated version of the EPDS if necessary.

Recommendation 6.0

An EPDS cut-off score greater than 12 may be used to determine depressive symptoms among English-speaking women in the postpartum period. This cut-off criterion should be interpreted cautiously with mothers who: 1) are non-English speaking; 2) use English as a second language, and/or 3) are from diverse cultures.

(Level of Evidence = III)

Discussion of Evidence

The EPDS has good sensitivity and specificity as an indicator of depressive symptoms when the recommended cut-off score greater than 12 is used in the postpartum period (Cox et al., 1987). However, while a score greater than 12 indicates the likelihood of postpartum depression, it does not provide an indication of severity, as some women who score over 18 may meet DSM-IV criteria for minor depression while others scoring 14 to 16 may meet the criteria for major depression. As such, an EPDS score should not be interpreted as a diagnostic measure in clinical settings (Holden, 1994). Furthermore, it is important to note that there will always be a certain number of *false positive* results (women who score positive on the EPDS who do not have postpartum depression) and *false negative* results (women who do not score positive on the EPDS and do have postpartum depression). Therefore, clinical judgement must always take precedence over scores on a self-report measure.

The EPDS has been used widely in many cultures and validation studies have been reported from diverse countries including Australia (Boyce et al., 1993), Chile (Jadresic et al., 1995), Canada (Zelkowitz & Milet, 1995), Italy (Carpiniello, Pariente, Serri, Costa & Carta, 1997), Norway (Eberhard-Gran, Eskild, Tambs, Schei & Opjordsmoen, 2001), Portugal (Areias et al., 1996), South Africa (Lawrie, Hofmeyr, de Jager & Berk, 1998), the UK (Harris et al., 1989) and the U.S. (Reighard & Evans, 1995; Roy et al., 1993). The reliability and validity of a French Canadian version of the EPDS has also been demonstrated (des Rivières-Pigeon et al., 2000).

However, when versions other than English are used, the EPDS score should be interpreted cautiously, as different cut-off scores may be required (Dennis, 2003a). For example, a threshold of 11/12 was suggested as appropriate for a French population (Guedeney & Fermanian, 1998) and a similar cut-off was recommended by researchers examining a Swedish community sample at 3 weeks postpartum (Wickberg & Hwang, 1996a). A threshold score of 11/12 was adopted to identify cases of depression among Arabic women when the EPDS was administered at 7 days postpartum (Ghubash, Abou-Saleh & Daradkeh, 1997), while a cut-off of 9/10 was considered most appropriate at 6 weeks postpartum in a Chinese population (Lee et al., 1998). Okano et al. (1998) found that a cut-off of 8/9 was suitable for identifying Japanese mothers. In an Australian study of Vietnamese and Arabic mothers, fewer Vietnamese women met the criteria for depression (Matthey, Barnett & Elliott, 1997). Detailed comparisons between EPDS and Diagnostic Interview Schedule (a diagnostic measure) questions suggested that these lower rates were possibly due to the social undesirability of verbally reporting negative emotions and a cut-off of 9/10 was suggested for Vietnamese women; similar response patterns were found in a Hong Kong study with Chinese mothers (Lee et al., 1998). It is possible that these Chinese women, like their Vietnamese counterparts, were reluctant to concede unhappiness or

distress in the early postpartum period to an interviewer; however, the women seemed less constrained in responding to a self-report questionnaire. In contrast, Yoshida et al., (2001) found similar depression rates in Japanese women residing in England and Japan using a clinical diagnostic interview. However, depression was not detected when the translated EPDS was used as a screening instrument. In particular, a 12/13 cut-off resulted in a sensitivity of zero, rendering the researchers to conclude that Japanese women may be reluctant to disclose depressive symptoms via a self-report measure. They also commented that the difference might be due to the exclusion of somatic symptoms in the EPDS since Japanese women tend to refer to physical problems and concerns about their infant rather than expressing feelings of low mood directly.

Although slightly different EPDS cut-off scores have been suggested for several translated versions, this is a common issue with most translated tools and not just the EPDS. Therefore, this should not be considered a serious limitation. These different cut-off scores reinforce the need for clinical judgement and caution when interpreting scores with non-English speaking mothers or women from diverse cultures. It also suggests that among non-English speaking mothers only a validated translation may be assumed to give scores that have the same meaning as those from the original English version (Cox & Holden, 2003). Finally, it should be noted that most investigations validating the EPDS incorporate Caucasian or homogenous samples in native countries. Limited research has been conducted psychometrically testing the EPDS in a recently immigrated sample or a heterogeneous population (Dennis, 2003a). See *Appendix G* for a summary of EPDS cut-off scores.

Recommendation 7.0

The EPDS must be interpreted in combination with clinical judgement to confirm postpartum mothers with depressive symptoms.

(Level of Evidence = III)

Discussion of Evidence

Although there is good evidence to suggest that the EPDS is a useful measure to confirm depressive symptoms in postpartum women, it is important to note that it should only be used as an adjunct to clinical evaluation. Researchers clearly suggest that a health professional's intuition and confidence in clinical knowledge is critical to avoid over reliance on an EPDS score and that the EPDS is not intended to replace the development of a relationship with the mother and a discussion into how a woman is adjusting to the postpartum period (Evins, Theofrastous & Galvin, 2000). In particular, it has been suggested that the EPDS should be used as an approach to facilitate communication between women and health professionals regarding the need for support and care in parenthood adjustments (Lundh & Gyllang, 1993). It is worth mentioning that Elliott & Leverton (2000) as cited in Cox & Holden (2003) identified that "the EPDS is clearly not a magic wand to be distributed for compulsory use without training. Alone the EPDS is just a piece of paper, a checklist. Combined with training in prevention, detection and treatment however, it becomes an important part of an effective program." (p. 3030) Clinical judgement is also fundamental when addressing the issue of cut-off scores (see *Recommendation 6.0*). Women scoring just below the cut-off score should not be taken to mean the absence of depression, especially if health care professionals have identified concerns.

Cox & Holden (2003) provide an example of guidelines for the use of the EPDS that are used in Scotland with Community Practitioners and Health Visitors. The guidelines also stress the importance of using the EPDS as part of a thorough assessment of the mother combined with clinical judgement. Should a woman score above a certain threshold on the EPDS, further follow-up would be required preferably within a two week period. On follow up examination if the low mood was thought to have been transient, reassurance would be given with information on follow-up with a physician, should the need arise. If the mood continued to be low, a number of home listening visits would be initiated, as this frequently indicated the presence of depression. These women were also encouraged to see their physician. The EPDS would also be used at a later time as part of a further assessment of how the woman was doing. Cox & Holden (2003) also identified that if any woman did not respond to these simple interventions, referral to a mental health expert would be warranted.

Recommendation 8.0

Nurses should provide immediate assessment for self harm ideation/behaviour when a mother scores positive (e.g., from 1 to 3) on the EPDS self-harm item number 10. *(Level of Evidence = IV)*

EPDS Item 10

The thought of harming myself has occurred to me...	
Yes, quite often	3
Sometimes	2
Hardly ever	1

Discussion of Evidence

Depression is a major risk factor for suicide and any positive score on this item should be taken seriously. It takes courage to acknowledge feeling suicidal and women do report this. For example, in a population-based sample of 594 Canadian mothers who completed the EPDS at 1, 4, and 8 weeks postpartum, the total number of mothers expressing any suicidal ideation was 4.5% (n = 27) at 1 week, remaining constant at 4.3% (n = 23) for the 4-week assessment and increasing slightly to 6.3% (n = 32) at 8 weeks (Dennis, 2004a). Similar findings were found in a U.S. population-based study (Georgiopoulos et al., 1999) and a study screening for postpartum depression in an inner-city population (Morris-Rush, Freda & Bernstein, 2003). Even if a woman scores 1 on this item, the fact that she has acknowledged this, indicates that she is experiencing distress and requires immediate attention.

Further assessment and crisis intervention is required by the nurse when a mother scores positive on self-harm item number 10 (RNAO, 2002a). A sample suicidal ideation resource sheet is provided in *Appendix H*.

Interventions for Postpartum Depression

While suicide assessment scales are available (Beck, Morris & Beck 1974; Cotton, Peters & Range, 1995; Joiner, Rudd & Rajab, 1997; Koslowsky, Bleich, Greenspoon, Wagner, Apter & Solomon, 1991; Osman, Gutierrez, Kopper, Barrios & Chiro, 1998), the developers of the EPDS have suggested that the following questions could be used as areas to assess a woman who scores positively on item 10.

1. How often do you have thoughts of harming yourself?
2. How severe are these feelings/How much have they been bothering you?
3. Have you had these kinds of feelings before? If so, what happened? How did you cope with them?
4. Have you made any previous suicide/self-harm attempts?
5. Have you thought about how you would harm yourself?
6. What support do you currently have at home?
7. (If she has a partner) Have you talked about how you are feeling with him/her?
8. Are you close to your parents/other family members? Do they know how you have been feeling?
9. Can you count on your partner and/or family members to give you emotional support?
10. (If she does not have a partner or family members to give support) Is there anyone else in your life whose support you can call on?
11. Have you told this person or anyone else about your feelings?
12. Could you phone this person and would he/she come if you felt you needed support?

Adapted from Holden, 1994.

Cox and Holden (2003) further suggest that the primary care nurse should not be expected to take sole responsibility for deciding on the basis of a raised score, who is depressed, therefore referrals and linkages for follow up may be required (RNAO, 2002a).

Treatment Recommendations

Recommendation 9.0

Nurses provide supportive weekly interactions and ongoing assessment focusing on mental health needs of postpartum mothers experiencing depressive symptoms. *(Level of Evidence = Ib)*

Discussion of Evidence

Several psychological/psychosocial interventions that have been evaluated for effectiveness in the treatment of postpartum depression have involved provision of weekly supportive interactions to individual mothers in their homes (Dennis, 2004c). The content of these interactions has varied, but has included interpersonal psychotherapy (Klier, Muzik, Rosenblum & Lenz, 2001; O'Hara, Stuart, Gorman & Wenzel, 2000), cognitive behavioural therapy (Appleby, Warner, Whitton & Faragher, 1997; Honey, Bennett & Morgan, 2002), or non-directive counselling (Cooper et al. 2003; Holden et al. 1989; Wickberg & Hwang, 1996b). Of these three interventions, the evidence is strongest in support of non-directive counselling. Further, both interpersonal psychotherapy and cognitive behavioural therapy are highly structured interventions, which require significant training. Therefore, this discussion will focus on the provision of non-directive counselling, acknowledging that other types of supportive interventions may also be useful depending upon the resources available in the individual practice setting.

Non-directive counselling involves the art of presencing (i.e., being there), displaying non-judgement, as well as purposeful listening in order to promote a safe and completely confidential space for the woman to explore her own feelings around her situation and the options she feels are available to her. Non-directive counselling can be provided by a variety of health care professionals, including nurses and midwives, with a relatively minimal amount of training required. For example, in one of the trials of non-directive counselling in the treatment of postpartum depression, training involved three weekly two-hour sessions focusing on counselling methods, and incorporating the use of videotapes and role play. (Holden et al., 1989)

Theoretical support for this type of intervention is derived from qualitative studies, which have indicated that women with postpartum depression feel a need to discuss their emotional concerns with a sympathetic listener (Chen, Wu, Tseng, Chou & Wang, 1999; Nahas et al., 1999; Ritter et al., 2000; Small et al., 1994). Furthermore, the RNAO (2002b) stresses the importance of dialogue that is focused on exploring and validating clients' thoughts, feelings, and behaviour.

To determine the effectiveness of this treatment approach, three European studies have been conducted (Holden et al., 1989; Wickberg & Hwang, 1996b; Cooper et al., 2003). In a U.K. trial, 55 women identified as depressed, through community-based EPDS screening at 6 weeks postpartum and a home psychiatric interview at 13 weeks, were randomized to either a control group (routine primary care) or a non-directive counselling group. Health visitors provided weekly home visits for 8 weeks with at least 30 minutes per visit devoted to non-directive counselling. Fifty of the 55 participants completed the trial, 26 in the counselling group and 24 in the control group. After a mean time interval of 13 weeks, a psychiatrist blinded to group allocation reassessed the women. According to diagnostic criteria, 18 (69%) women in the counselling group had fully recovered in comparison to only 9 (38%) women in the control group. However, one third of the counselled women did not recover despite the intervention. Of this sub-group, two had a long history of depression, another had a previous episode of depression, and a further two had a family history of depression, signifying postpartum depression occurring in the context of a continuum of psychiatric disturbances may be less likely to respond to a psychosocial intervention.

Extending these findings, Wickberg & Hwang (1996b) conducted a population-based study to evaluate the effect of counselling among Swedish women. Mothers participated in a two-stage screening procedure completing the EPDS at 8 and 12 weeks postpartum. Women who scored above 11 on both screening occasions were interviewed at home by a clinical psychologist, blinded to EPDS scores, at 13 weeks postpartum using the Montgomery-Asberg Depression Rating Scale (MADRS). Women who were identified as depressed according to DSM-III-R criteria were randomly allocated to receive either routine primary care (n=16) or non-directive counselling (n=15). Child health clinic nurses provided the intervention, which consisted of 6 weekly one-hour counselling visits in clients' homes or at the clinic. Twelve (80%) women who received counselling were fully recovered after the intervention in comparison to 4 (25%) mothers in the control group.

Interventions for Postpartum Depression

Finally, Cooper et al., (2003) randomized 192 primiparous women to receive either routine care by the general practitioner (control group), or one of three forms of therapy (cognitive behavioural therapy, psychodynamic psychotherapy, or non-directive counselling) delivered weekly in the woman's home by nurse health visitors or specialists. When assessed at 4.5 months postpartum (immediately following treatment), women in all three intervention groups had significantly lower EPDS scores compared to women in the control group.

Despite these positive results, all three studies have limitations. First, all three studies incorporated a small homogeneous sample, and all were conducted in a European context. A larger, North American trial is needed to confirm that the results will generalize to the Canadian population (Dennis, 2004a).

The available evidence does provide some guidance regarding the population that is most likely to respond to this intervention. Although the available studies included women who met diagnostic criteria for major or minor depression, women who were seriously ill were less likely to respond to the intervention (Wickberg & Hwang, 1996), as were women with a strong personal or family history of depression (Holden et al., 1987). As such, this intervention is most likely to be effective for women with mild to moderate depression, and those who are seriously ill or have chronic depression or another underlying psychiatric illness will likely require adjunctive medication (Cox & Holden, 2003). In these cases, a referral for medical assessment and treatment will generally be required. The literature related to provision of non-directive counselling by health visitors in the UK has identified the need for those providing the intervention (e.g., nurses, health visitors) to have access to support from psychiatrists, psychologists, or community psychiatric nurses in order that such referrals can be made in a timely fashion (Holden, 1996).



Recommendation 10.0

Nurses facilitate opportunities for the provision of peer support for postpartum mothers with depressive symptoms. *(Level of Evidence = IIb)*

Discussion of Evidence

According to Dennis (2003b; 2004b), detailed analyses of social support variables in predictive studies clearly suggest the following social deficiencies significantly increased the risk of postpartum depression: (1) not having someone to talk openly with who has shared and understood a similar problem (Brugha et al., 1998); (2) lacking an intimate confidant or friend to converse with (Brugha et al., 1998; O'Hara, Rehm, & Campbell, 1983; Paykel, Emms, Fletcher & Rassaby, 1980; Romito, Saurel-Cubizolles, & Lelong, 1999); (3) not receiving support without having to ask for support (Brugha et al., 1998); and (4) feeling socially isolated (Mills et al., 1995). Conversely, companionship and belonging to a group of similar others had a protective effect (Cutrona, 1989). In addition, qualitative studies revealed that many women experiencing postpartum depression experience a profound sense of isolation, loneliness, and the perception that people did not know what they were experiencing. As part of their recovery, many women spoke about the positive effects of attending a support group (Beck, 2002).

Support provided by lay people who have experienced a similar health problem or stressor has been shown to have a positive effect on psychological well-being (Cohen, Underwood & Gottlieb, 2002; Dennis, 2003b). There are several pathways through which social support can affect psychological well-being (Cohen & Wills, 1985). Members of a social network may exert a beneficial influence on mental health by providing normative guidance about health-relevant behaviours (Berkman & Glass, 2000). Integration in a social network may also directly produce positive psychological states, including a sense of purpose, belonging, and recognition of self-worth (Cohen et al., 2002). These positive states, in turn, may benefit mental health due to an increased motivation for self-care, as well as the modulation of the neuroendocrine response to stress (Cohen et al., 2002).

Despite this theoretical and empirical work suggesting the benefits of support from lay individuals, including peers, and clinical experience indicating peer support groups may be effective, limited research has been conducted determining the effectiveness of peer support for the treatment of postpartum depression. Of the three group-based investigations that have evaluated the benefits of peer support, the results are equivocal (Dennis, 2004a). In a Canadian study, the effect of a support group was evaluated through the recruitment of women on the second day postpartum who were asked to complete and return via mail a set of mood scales during the first 2 weeks postpartum (Fleming, Klein & Corter, 1992). Of the 1081 questionnaires distributed over a 3-year period, 781 (72%) were returned with 156 women scoring above 13 on the EPDS or 21 on the Multiple Affect Adjective Checklist. Seventy-six mothers with depressive symptoms (48% of all depressed mothers) and 76 non-depressed mothers were recruited into the study. Participants were non-randomly allocated to one of three groups: an 8-week postpartum support group (n=44), a 'Group-by-Mail' group (participants received scripts via mail that were adapted from the support group sessions; n=15), or a control group (usual postpartum care; n=83). All groups included participants who were depressed and non-depressed and women completed the Centre for Epidemiological Studies-Depression Scale (CES-D) at 6 and 20 weeks postpartum. While the majority of participants experienced an

Interventions for Postpartum Depression

improvement in mood from 2 to 20 weeks postpartum regardless of group allocation, the support group interventions did not significantly alleviate depressive symptoms. It is important to note that a major limitation of this quasi-experimental study was the inclusion of both depressed and non-depressed mothers in the group sessions.

Conversely, a Chinese trial evaluated the effect of weekly support group meetings facilitated by a nurse for women who were *all experiencing postpartum depression* (Chen, Tseng, Chou & Wang, 2000). Women were recruited in-hospital on the second or third day postpartum to complete a mailed Beck Depression Inventory (BDI) at 3 weeks postpartum. Eighty-five percent of women approached agreed to participate (n=941) with 414 returning the completed BDI. Sixty women with BDI scores above 9 were randomized to either a support group (n=30) or a control group (usual postpartum care; n=30). At the 4-week assessment, 60% (n=18) of women in the control group exhibited depressive symptoms in comparison to only 33% (n=9) of those in the support group.

Finally, a group program for postnatally ‘distressed’ Australian women and their partners was evaluated (Morgan et al., 1997). The program consisted of 8 weekly 2-hour sessions, including one session for the couple, facilitated by an occupational therapist and nurse where psychotherapeutic and cognitive-behavioural strategies were employed. The results from 6 separate groups are reported, in which 34 couples participated; only one woman dropped out and attendance was over 90%. Participants completed the EPDS and General Health Questionnaire (GHQ) during the first and last session and were followed-up at 12 months. At program initiation, 66% of women had EPDS scores above 12, which decreased to 22% at the final session, and no participant exhibited depressive symptoms at the 12-month follow-up.

Nurses may be in a position either to organize peer support groups or may direct women to community resources based on availability and maternal preference. If group interventions are to be offered, the appropriateness of the group modality should be assessed for each individual. For example, some women may be too severely distressed to benefit from a group intervention. Furthermore, barriers to group attendance need to also be considered and may include:

- perceived appropriateness of groups in the cultural context;
- stigma and the need for community education;
- need for childcare and transportation reimbursement; and
- feasibility in rural or remote communities with a limited number of women with postpartum depression at any time.

Transcending the typical group modality, a pilot trial evaluating the effect of telephone-based peer support on postpartum depression symptoms was conducted (Dennis, 2003b). Canadian mothers who scored above 9 on the EPDS were identified through region-wide screening at the 8-week immunization clinics managed by public health nurses. Forty-two eligible and consenting mothers were randomly allocated to either a control group (standard postpartum care; n = 22) or a peer support group (standard postpartum care plus telephone-based support, initiated within 48 to 72 hours of randomization, from a mother who had previously experienced postpartum depression and had attended a 4-hour training session; n = 20). Follow-up was conducted at 4 and 8 weeks post-randomization by blinded research assistants. Significant group differences were found in probable major depressive symptoms (EPDS score above 12) at the 4 and 8-week assessments. Specifically, at the 4-week assessment, 40.9% of mothers in the control group scored above 12

on the EPDS in comparison to only 10% in the peer support group. Similar findings were found at the 8-week assessment where 52.4% of mothers in the control group continued to score above 12 on the EPDS in comparison to 15% of mothers in the peer support group. A significant mean difference was found at the 4-week assessment between mothers in the control ($M = 12.1$; $SD = 4.6$) and peer support ($M = 8.5$; $SD = 3.7$) ($t = 2.8$, $p = 0.008$) groups. Comparable group differences were found at the 8-week assessment ($t = 2.9$, $p = 0.006$). These preliminary results suggest that telephone-based peer support may be an effective intervention and a larger randomized controlled trial is underway.

General Recommendations

Recommendation 11.0

Nurses facilitate the involvement of partners and family members in the provision of care for postpartum mothers experiencing depressive symptoms, as appropriate. *(Level of Evidence = 1b)*

Discussion of Evidence

When considering family involvement in care, family members should be broadly defined uniquely for the individual as whomever the person defines as being family. Family members can include, but are not limited to, parents, children, siblings, extended family members and friends (RNAO, 2002c). Family members can play an important role in the detection of postpartum depression, since they are often in a position to recognize early symptoms. For this reason, some researchers and health professionals have recommended that new fathers and other family members be educated about the signs and symptoms of postpartum depression (Ross et al., 2005). The RNAO guideline on Crisis Intervention (2002a) identifies that “significant others should be included in the planning for a client, particularly if they are a future resource for the client”. Pg 27.

Alternatively research has consistently identified a significant relationship between lack of social support and the development of postpartum depression (Brugha et al., 1998; Robertson, Grace, Wallington & Stewart, 2004). This support is particularly important from the mother’s partner (Beck 2001; Eberhard-Gran et al., 2002; Steinberg & Bellevance, 1999). Furthermore, research has identified problems in the marital or equivalent relationship as a moderate risk factor for postpartum depression (Robertson et al., 2004). Additionally the RNAO Crisis Intervention guideline (2002a) suggests that an assessment of the family or significant others be conducted to determine whether they are part of the problem or part of the solution.

A Canadian trial was conducted to determine the impact of partner support on women’s outcomes following treatment for postpartum depression (Misri, Kostaras, Fox & Kostaras, 2000). In this study, women who met the DSM-IV criteria for major depression with postpartum onset were randomly allocated to either a control group (7 psycho-educational visits with a psychiatrist; $n = 13$) or an intervention group (7 psycho-educational visits with a psychiatrist during which the woman’s partner participated in 4 of the sessions; $n=16$). Immediately post-intervention there were no significant differences in mean EPDS scores between the intervention (mean =11.4, $SD=6.2$) and control (mean =14.6, $SD=7.2$; $p=0.20$) groups. However, at the 4-week follow-up, significant group differences were found favouring the intervention group.

This trial is supported by the results of a qualitative study examining a group program for women with postpartum depression and their partners (Morgan et al., 1997). In this Australian study, 34 women attended one of 6, 8-session support groups, and their partners (20 men) attended an evening session at week 6 of the program. Prior to the partner session, many of the participants perceived their partner relationships to be strained, and both partners reported problems communicating with one another about the woman's distress. After the couples' session, some women reported that their partners were more supportive than prior to attending the group, and others reported improvements in both partners' abilities to communicate with one another. Men also reported finding the session useful, both from gaining a greater understanding of their partner's mood state, and from having the opportunity to hear how other men experienced similar problems (Morgan et al., 1997).

Despite this research, the mother's preference and/or the characteristics of the relationship with her family member should determine the appropriateness of involvement. In particular, culturally-specific traditions with respect to involvement (or lack of involvement) of the partner during the early postpartum period should be considered. It is also important to note that involving the partner in the provision of care may have beneficial effects on their own mental health since research suggests a high proportion of partners of women with postpartum depression may also be experiencing depression (Areias et al., 1996; Lane et al., 1997; Leathers, Kelley & Richman, 1997; Matthey, Barnett, Kavanagh & Howie, 2001; Matthey, Barnett, Ungerer & Waters, 2000; Morse, Buist & Durkin, 2000).

Recommendation 12.0

Nurses promote self care activities among new mothers to assist in alleviating depressive symptoms during the postpartum period.

(Level of Evidence = IV)

Discussion of Evidence

In Canada, self-care is proposed as one of three key health promotion strategies in the document *Achieving Health for All: A Framework for Health Promotion* (1986). This document defines self-care as “the range of activities individuals undertake to enhance health, prevent disease, evaluate symptoms and restore health. These activities are undertaken by individuals on their own behalf, either separately or in participation with health professionals. At the individual level, care activities are self-determined decisions or actions to promote health or treat illness”. Self-care practices such as exercise, sleep hygiene, nutrition, adhering to treatment, and engaging in supportive relationships are continually evaluated by the individual with regards to their impact on the individual's sense of well-being. At the professional level, health professionals support persons' self-care practices via provision of education and counselling to address factors such as self-concept, self-efficacy and motivation (Edwards, Murphy, Moyer & Wright, 1995). Health Canada is currently conducting studies in the area of self-care. Further information can be found at www.hc-sc.gc.ca.

Despite the widespread use of self-care practice in the general population, there is a paucity of research into particular self-care practices and their impact on depression (Haug, Wykle & Namazi, 1989; Kemper, Lorig & Mettler, 1993; Padula, 1992). In a systematic review of exercise and its effects on depression, anxiety and other mood states, Byrne & Byrne (1993) concluded that exercise did have positive effects on depression. The results, while encouraging, are cautionary at best because this study like others concerning self-care practices and depression, are plagued with methodological problems such as small, homogeneous sample and measurement problems.

Self-care strategies are important for all women during the postpartum period. For women experiencing depressive symptoms, self care may assist in alleviating depressive symptoms in conjunction with appropriate medical and psychological interventions. It is important to note that engaging in self-care practices alone will not alleviate moderate or severe postpartum depression (Paxton, Shrubbs, Griffiths, Cameron & Maunder, 2000). Armstrong & Edwards (2004) investigated the effectiveness of a pram-walking program in reducing depressive symptoms in mothers who had given birth in the past year. Primary outcomes of the study were to reduce depressive symptoms and improve fitness levels in the pram-walking group while secondary outcomes were to improve social support in both groups. Results indicated that mothers who were in the pram-walking group had improved fitness levels as well as less depressive symptoms.

Fatigue is a common issue reported in the early postpartum period (Small et al., 1994, Pugh & Milligan, 1995). There is theoretical support for lack of sleep and maternal mood in the postpartum period suggesting that limited or lack of sleep may be associated with mood lability and emotional reactivity in the early postpartum period (Errante, 1985). In a qualitative study by Small et al., (1994) reported that mothers expressed fatigue as one of the top four contributing factors to their depression. Furthermore in a study examining fatigue and postpartum depression, Bozoky & Corwin (2002) found that early postpartum fatigue was a predictor of maternal mood. These authors suggested that early interventions to reduce fatigue, may be beneficial in reducing depression. However, the link between fatigue and postpartum depression has not been well delineated or translated into interventions related specifically to sleep. Again, these studies used relatively small and homogeneous samples of white, mostly married women indicating the need for further research in this area.

Self-care practices also extend into various cultural groups. Several descriptive studies were found in the literature around a specific set of traditional postpartum practices regarded as beneficial for healing in the postpartum period (Holroyd et al., 1996; Hundt et al., 2000; Kaewern et al., 2003). In Chinese culture, childbirth is considered an event which causes an imbalance of Yin and Yang in the body and thus women are encouraged to rest preferably in bed (Holroyd et al., 1996). In the Arab culture, a seclusion period of 40 days with a focus on rest, recuperation and social support is often observed in the postpartum period (Hundt et al., 2000). Thus, awareness and appreciation of cultural postpartum practices should form an important part of nursing practice. Clearly, further research surrounding self-care activities and impact on postpartum depression is warranted.

Recommendation 13.0

Nurses consult appropriate resources for current and accurate information before educating mothers with depressive symptoms about psychotropic medications. *(Level of Evidence = IV)*

Discussion of Evidence

Some mothers may be prescribed psychotropic medications such as antidepressants depending on the etiological profile of the depression and/or the severity of their symptoms. As such, it is important that nurses are knowledgeable regarding administration of psychotropic medications. In addition, breastfeeding mothers may be concerned about exposing their infant to the medication through breast milk. It is critical for nurses to educate mothers about the risk-benefit analysis to assist them in making an informed decision about breastfeeding. The risk-benefit analysis includes information about the risks of untreated depressive symptoms for mothers, the risks to medication exposure to the nursing infant, and the benefits of breast feeding for both mothers and infants (Burt, Suri, Altshuler, Stowe, Hendrick & Muntean, 2001; Hoatetter et al., 2000). In spite of the advances in psychopharmacological treatment for depression, often case reports and small studies involve various methods of quantifying infant exposure to medications (Suri et al., 2002). This methodological limitation makes it difficult to compare across studies as well as to guide practice. More research is needed about the extent of medication exposure via breast milk as well as subsequent effects on infant development (Marcus, Barry, Flynn, Tandon & Greden, 2001). Available resources such as Motherisk (www.motherisk.org), Health Canada (www.hc-sc.gc.ca/english/protection/drugs.html), physicians and pharmacists can provide nurses with current information about the safety and side effects of specific psychotropic medications.

Education Recommendation

Recommendation 14.0

Nurses providing care to new mothers should receive education on postpartum depression to assist with assessment and intervention of women experiencing depressive symptoms.

(Level of Evidence = III)

Discussion of Evidence

Educating health professionals in the management of postpartum depression is important (Appleby et al., 2003). Nurses and other health providers require knowledge and skill in intervening in women with depressive symptoms and in the use of the Edinburgh Postnatal Depression Scale. In one study, it was reported that educating health visitors in the use of the Edinburgh Postnatal Depression Scale and in cognitive behavioural and counselling skills resulted in interventions that were effective and highly acceptable to mothers with postpartum depression (Seeley, Murray & Cooper, 1996). The results of a randomized controlled trial indicated that health visitors who were given short training sessions in non-directive counselling can effectively help women with postpartum depression (Holden et al., 1989).

The content of the RNAO recommendations in this guideline *Interventions for Postpartum Depression*, could be: 1) included in the basic education of nurses in their core curriculum; 2) available as part of continuing education (e.g., perinatal certificate programs); 3) orientation programs; and 4) made available through professional development opportunities.

Each nurse is responsible for seeking relevant information related to their professional practice and own learning needs. Continuing competence in the area of postpartum depression ensures that the nurse is able to effectively support women and their families in a changing health and social environment. Competence is the nurses' ability to use her/his knowledge, skill, judgement, attitudes, values and beliefs to perform in a given role, situation and practice setting (College of Nurses of Ontario, 2004).

Organization & Policy Recommendations

Recommendation 15.0

Practice settings establish local care pathways and protocols to guide practice and to ensure mothers with depressive symptoms have access to safe and effective treatment.

(Level of Evidence = III)

Discussion of Evidence

It has been suggested that care pathways may improve patient care by influencing underlying practice (Co, Johnson, Duggan, Casella & Wilson, 2003). Institutions or agencies adopting clinical practice guidelines should have policies and protocols in place that reflect current practice which is evidence based for their setting. Clinical or care pathways are often developed to improve care for patients, enhance coordination of care and reduce costs. Clinical pathways have improved clinical outcomes in diverse areas such as diabetes and depression (Katon et al., 2004), hip fractures (Koval et al., 2004), coronary artery disease (Cannon, 2003), prevention and management of pressure ulcers (Newton, 2003), and sickle cell anemia (Co et al., 2003).

While specific, evidence-based criteria have not been developed related to the detection of depressive symptoms in the postpartum period, general principles for screening procedures have been outlined (Wilson & Junger, 1968) and include specific healthcare system recommendations. These healthcare system principles can be used to guide protocols to ensure that mothers identified with depressive symptoms will receive appropriate and effective treatment or early intervention (Dennis, 2003a). Based on these principles, standard policies for referral and treatment options that are accessible and acceptable must be established. It is also important to outline how the findings (e.g., EPDS scores) will become part of a mother's medical record. Methods to assess adherence to a care pathway or protocol should be developed, since without adherence, there is no benefit in identifying women with depressive symptoms. The degree to which care pathways and effective treatments are available will vary from setting to setting: some communities may have a well-developed referral network and a variety of effective and accessible treatment options in place, while others may be just beginning to identify the needs of postpartum women or have limited resources to address these needs. However, in each individual practice context, it is important that each symptomatic woman confirmed with depressive symptoms has timely access to appropriate treatment resources. In

Interventions for Postpartum Depression

rural or remote areas these resources may be very limited. However, it is necessary to remember that the type of intervention offered in these areas, will probably be different than those offered in a larger centre but equally as important. For general information about these healthcare system criteria refer to Muir Gray (2001) and Sackett (1987).

In the MacArthur (2002) preventive trial the intervention was well designed to include training, a symptom checklist, care plans, and evidence-based guidelines so that care would be tailored to meet the individual woman's needs. The results of this particular study demonstrated improved psychological health outcomes in women at 4-months postpartum. This may suggest that the well established protocols or care plans may have had a beneficial effect on maternal mood outcomes. Further research in this area is strongly recommended. An example of a care pathway is included in *Appendix K*.

Recommendation 16.0

Practice settings provide orientation and continuing education related to the care of postpartum mothers experiencing depressive symptoms during the postpartum period. (*Level of Evidence = IV*)

Discussion of Evidence

Given the continuous advancement of knowledge, there is a need for ongoing education, orientation and validation of what is learned so nurses can provide care that is appropriate, facilitative and grounded in current evidence. In a systematic review of educational and organizational interventions on general depression in primary care, Gildbody and colleagues (2003) found that successful strategies such as educational meetings, educational outreach visits and reminders integrate education with other organizational approaches (e.g., revision of professional roles) and are multifaceted. Further research in the area of orientation and continuing education programs related to the topic of postpartum depression is required. See *Appendix L* for a list of Internet resources, videos and recommended reading.



Recommendation 17.0

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:

- An assessment of organizational readiness and barriers to education.
- Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process.
- Dedication of a qualified individual to provide the support needed for the education and implementation process.
- Ongoing opportunities for discussion and education to reinforce the importance of best practices.
- Opportunities for reflection on personal and organizational experience in implementing guidelines.

In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the *Toolkit: Implementation of Clinical Practice Guidelines* based on available evidence, theoretical perspectives and consensus. The *Toolkit* is recommended for guiding the implementation of the RNAO guideline *Interventions for Postpartum Depression*. *(Level of Evidence = IV)*

Discussion of Evidence

Cox & Holden (2003) suggest that before starting a postnatal initiative regarding postpartum depression it is essential to set up an interdisciplinary steering committee with representatives from maternal-child, obstetrics, and psychiatric primary care services. The committee should produce recommendations on services and guidelines consistent with the services available in the locality. All services should be informed of the new program and of decisions reached by the committee.

It also suggested that successful implementation of best practice guidelines requires the use of a structured, systematic planning process and strong nursing leadership. A conceptual framework proposed by Rycroft-Malone and colleagues (2002) suggest that the interplay of three key elements: 1) evidence; 2) environmental context; and 3) facilitation, is required for practice change. To support guideline implementation, RNAO (through a panel of nurses, researchers and administrators) has developed the *Toolkit: Implementation of Clinical Practice Guidelines* (2002d) based on available evidence, theoretical perspectives and consensus. The *Toolkit* is recommended for guiding the implementation of the RNAO guideline *Interventions for Postpartum Depression*. Refer to *Appendix M* for a description of the *Toolkit*.

Research Gaps & Implications

This nursing best practice guideline posed three clinical questions to structure the reviewed literature. In each of these three areas: prevention, treatment and the confirmation of depressive symptoms, research gaps were identified. Further research in each of the following areas would assist in guiding the care of mothers with postpartum depression.

Prevention Interventions

As a means to assess the effectiveness of preventive postpartum depression interventions, large randomized controlled trials are required. Replication of previous trials such as MacArthur (2002) may be beneficial to determine if the results are generalizable in a Canadian context. General research questions include:

- 1) Are interventions that are initiated antenatally more effective than those initiated postnatally?
- 2) Are interventions that target at-risk mothers more effective than those provided to a general maternal population?
- 3) Are supportive interventions more effective if they are provided by a health professional than a lay individual?
- 4) What are mothers' perceptions of preventative interventions?

Confirming Depressive Symptoms

Further research is required to examine the psychometric properties of the EPDS in a Canadian context among mothers from diverse cultures. Potential research questions are as follows:

- 1) Is there an optimal time for the administration of the EPDS to reliably identify women with depressive symptoms?
- 2) Is the reliability and validity of the EPDS influenced by repeated administrations?

Treatment Interventions

Further research is required regarding the effectiveness of treatment interventions and options for Canadian mothers experiencing postpartum depression. Potential research questions include:

- 1) What are the benefits and risks of psychotropic medications in the management of depressive symptoms?
- 2) What is the effect of enhanced partner support in the treatment of postpartum depression?
- 3) Which factors promote and hinder the utilization of available treatment options?
- 4) What are mothers' perceptions of treatment interventions?
- 5) What is the effect of peer support groups mediated by nurses among mothers experiencing postpartum depression?

The intervention of non-directive counselling is worth further exploration in view of promising findings. Potential research questions for this treatment intervention are as follows:

- 1) What is the optimal timing of the intervention? In the studies examined, the intervention often did not begin until 6-8 weeks postpartum. Research is needed to determine whether the intervention would be just as effective if offered earlier or later in the postpartum period.
- 2) What is the duration of the intervention? The three trials administered the intervention for approximately 6 to 10 weeks, and it is unknown whether offering the intervention for a shorter or longer duration would be as effective and/or cost-effective.
- 3) What is the frequency of the intervention? All three trials described offered the intervention on a weekly basis. It is currently unknown whether administering the intervention less frequently (e.g., biweekly), as may be necessary due to limited resources and/or a rural or remote setting, will be equally effective. Conversely, it is foreseeable that some women could benefit from a more frequent intervention. No research examining the potential benefits of more frequent home visits is available.
- 4) What is the effect of location of the intervention? In two of the three trials of non-directive counselling, the intervention was home-based. In the third trial, the intervention was provided either at the participant's home or in a clinic and no comparisons in outcomes were made between participants who received the intervention at each site. Therefore, it is unknown if the intervention is as effective when provided in a clinic setting. Other methods of administering the intervention should also be explored, e.g., via telephone.

General Interventions

Potential Research Questions:

- 1) What self care practices are effective in alleviating depressive symptoms in the postpartum period?
- 2) Are the self-care practices of mothers with depressive symptoms different than mothers without depressive symptoms?
- 3) What role does fatigue play in the development of postpartum period?
- 4) What complimentary therapies are effective as an adjunct to postpartum depression treatment?

Education/Organization

Limited research is available concerning the role of educators and organizations in the care of mothers experiencing postpartum depression. The majority of the evidence for these recommendations is Level IV evidence and as such further research is required. Potential research questions include:

- 1) Do postpartum care pathways improve decision-making in nurses?
- 2) Do postpartum care pathways significantly improve timely access to postpartum depression treatment?
- 3) What are the essential nursing education components in providing care for women identified with postpartum depressive symptoms?
- 4) What are the organizational, educational and practice structures required to promote the transfer of knowledge to practice?

Evaluation/Monitoring of Guideline

It is recommended that organizations implementing this nursing best practice guideline consider how the implementation and its impact will be monitored and evaluated. The following table, based on a framework outlined in the *RNAO Toolkit: Implementation of Clinical Practice Guidelines (2002d)* illustrates some indicators for monitoring and evaluation:

	Structure	Process	Outcome
Objectives	<ul style="list-style-type: none"> ■ To evaluate the supports available in the organization that allow for nurses to implement flexible care for women with symptoms of postpartum depression. 	<ul style="list-style-type: none"> ■ To evaluate the changes in practice that lead towards implementation of prevention, assessment and caregiving strategies for women with symptoms of postpartum depression. 	<ul style="list-style-type: none"> ■ To evaluate the impact of implementation of the recommendations.
Organization/ Unit	<ul style="list-style-type: none"> ■ Review of best practice recommendations by organizational committee(s) responsible for policies or procedures. ■ Availability of client education resources that are consistent with the best practice recommendations. ■ Organizational mission statement that supports a model of care that promotes maternal decision making and consistency of the nurse/ client relationship(mother friendly environment). ■ Continued investment in staff training to provide enhanced high quality care for mother's with symptoms of postpartum depression. ■ Provision of accessible resource people for nurses to consult for ongoing support after the initial implementation. 	<ul style="list-style-type: none"> ■ Modification to policies and/or procedures consistent with best practice recommendations. ■ Development of forms or documentation systems that encourage documentation of clinical assessment and concrete procedures for making referrals when nurses are doing the assessments. ■ Organizational practices that support staff decision making and promote staff satisfaction. 	<ul style="list-style-type: none"> ■ Policies and procedures related to best practice strategies consistent with the guideline. ■ Protocols established to ensure safety and access to effective treatment. ■ Staff orientation program to include the EPDS , symptoms of postpartum depression and internal and community supports/resources. ■ Total number of referrals received.

	Structure	Process	Outcome
Nurse	<ul style="list-style-type: none"> ■ Percentage of nurses and other health care professionals attending the best practice guideline education sessions on postpartum depression. 	<ul style="list-style-type: none"> ■ Nurses self assessed knowledge of: <ol style="list-style-type: none"> a) normal postpartum adjustments. b) differential features of postpartum depression. c) how to use the EPDS in combination with clinical judgement for assessment of symptoms of postpartum depression. d) their role to properly assess (differentiate between the “blues” and symptoms of postpartum depression, assess for self-harm) and initiate appropriate care in a timely manner. ■ Percentage of nurses self-reporting: <ol style="list-style-type: none"> a) adequate assessment of clients with symptoms of postpartum depression. b) adequate knowledge of the range of care options. c) adequate knowledge of community referral sources for clients with symptoms of postpartum depression. d) adequate knowledge of cultural sensitivity. 	<ul style="list-style-type: none"> ■ Evidence of documentation in the client’s record consistent with the guideline recommendation. ■ Percentage of symptomatic clients assessed by nurses using the EPDS as indicated in chart audits. ■ Percentage of nurses referring symptomatic clients for follow-up to community resources.
Client	<ul style="list-style-type: none"> ■ Percentage of clients identified with symptoms of postpartum depression. 	<ul style="list-style-type: none"> ■ Percentage of clients and/or families who received education sessions and/or support for symptoms of postpartum depression. ■ Percentage of clients referred to community services. 	<ul style="list-style-type: none"> ■ Increased knowledge and understanding of postpartum depression, care approaches and community resources. ■ Improvement in emotional well-being (satisfaction with care as reported by clients and/or family).
Financial Costs	<ul style="list-style-type: none"> ■ Provision of adequate financial resources for the level of staffing necessary to implement guideline recommendations. 	<ul style="list-style-type: none"> ■ Cost for education, other interventions and on the job supports. ■ New assessment/ documentation systems. ■ Support systems. ■ Development of new programs. 	<ul style="list-style-type: none"> ■ Overall resource utilization (identify organizational specifics, new staff hires, etc).

Implementation Strategies

The Registered Nurses' Association of Ontario and the guideline development panel have compiled a list of implementation strategies to assist healthcare organizations or healthcare disciplines who are interested in implementing this guideline. A summary of these strategies follows:

- Have a dedicated person such as an advanced practice nurse or a clinical resource nurse who will provide support, clinical expertise and leadership. The individual should also have good interpersonal, facilitation and project management skills.
- Establish a steering committee comprised of key stakeholders and members committed to leading the initiative. Keep a work plan to track activities, responsibilities and timelines.
- Provide educational sessions and ongoing support for implementation. The education sessions may consist of presentations, facilitator's guide, handouts, and case studies. Binders, posters and pocket cards may be used as ongoing reminders of the training. Plan education sessions that are interactive, include problem solving, address issues of immediate concern and offer opportunities to practice new skills (Davies & Edwards, 2004).
- Provide organizational support such as having the structures in place to facilitate the implementation. For example, hiring replacement staff so participants will not be distracted by concerns about work and having an organizational philosophy that reflects the value of best practices through policies and procedures. Develop new assessment and documentation tools (Davies & Edwards, 2004).
- Identify and support designated best practice champions on each unit to promote and support implementation. Celebrate milestones and achievements, acknowledging work well done (Davies & Edwards, 2004).
- Organizations implementing this guideline should look at a range of self-learning, group learning, mentorship and reinforcement strategies that will over time, build the knowledge and confidence of nurses in implementing this guideline.
- Teamwork, collaborative assessment and treatment planning with the client and family and through interdisciplinary work are beneficial in implementing guidelines successfully.
- The RNAO's Advanced/Clinical Practice Fellowships (ACPF) Project is another resource that Registered Nurses in Ontario may apply for a fellowship and have an opportunity to work with a mentor who has expertise in postpartum depression. With the ACPF, the nurse fellow will have the opportunity to hone their skills in assessing and providing interventions with mothers experiencing postpartum depression.

In addition to the tips mentioned above, the RNAO has developed resources that are available on the website. A *toolkit* for implementing guidelines can be helpful if used appropriately. A brief description about this *toolkit* can be found in *Appendix M*. A full version of the document in PDF format is also available at the RNAO website, www.rnao.org/bestpractices.

Process For Update/Review of Guideline

The Registered Nurses' Association of Ontario proposes to update the Best Practice Guidelines as follows:

1. Each nursing best practice guideline will be reviewed by a team of specialists (Review Team) in the topic area every three years following the last set of revisions.
2. During the three-year period between development and revision, RNAO program staff will regularly monitor relevant literature in the field.
3. Based on the results of the monitor, program staff will recommend an earlier revision period. Appropriate consultation with a team of members comprising original panel members and other specialists in the field will help inform the decision to review and revise the guideline earlier than the three-year milestone.
4. Three months prior to the three year review milestone, the program staff will commence the planning of the review process by:
 - a. Inviting specialists in the field to participate in the Review Team. The Review Team will be comprised of members from the original panel as well as other recommended specialists.
 - b. Compiling feedback received and questions encountered during the dissemination phase as well as other comments and experiences of implementation sites.
 - c. Compiling new clinical practice guidelines in the field, systematic reviews, meta-analysis papers, technical reviews and randomized controlled trial research, and other relevant literature.
 - d. Developing detailed work plan with target dates and deliverables.

The revised guideline will undergo dissemination based on established structures and processes.

References

- Postpartum depression – A medical dictionary, bibliography, and annotated research guide to internet references* (2004). San Diego, CA: Icon Health Publications.
- AGREE Collaboration.(2001). Appraisal of Guidelines for Research & Evaluation (AGREE) Instrument. AGREE Collaboration [Electronic version]. Available: www.agreecollaboration.org.
- Affonso, D. D., De, A. K., Horowitz, J. A., & Mayberry, L. J. (2000). An international study exploring levels of postpartum depressive symptomatology. *Journal of Psychosomatic Research*, 49(3), 207-216.
- American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition*. Washington, DC: American Psychiatric Association.
- Appleby, L., Hirst, E., Marshall, S., Keeling, F., Brind, J., Butterworth, T., et al., (2003). The treatment of postnatal depression by health visitors: Impact of brief training on skills and clinical practice. *Journal of Affective Disorders*, 77(3), 261-266.
- Appleby, L., Warner, R., Whitton, A., & Faragher, B. (1997). A controlled study of fluoxetine and cognitive-behavioural counselling in the treatment of postnatal depression. *British Medical Journal*, 314(7085), 932-936.
- Areias, M. E., Kumar, R., Barros, H., & Figueiredo, E. (1996). Comparative incidence of depression in women and men, during pregnancy and after childbirth. Validation of the Edinburgh Postnatal Depression Scale in Portuguese mothers. *British Journal of Psychiatry*, 169(1), 30-35.
- Armstrong, K. & Edwards, H. (2004). The effectiveness of a pram-walking exercise programme in reducing depressive symptomatology for postnatal women. *International Journal of Nursing Practice*, 10(4), 177-194.
- Armstrong, K. L., Fraser, J. A., Dadds, M. R., & Morris, J. (1999). A randomized, controlled trial of nurse home visiting to vulnerable families with newborns. *Journal of Paediatrics & Child Health*, 35(3), 237-244.
- Armstrong, K. L., Fraser, J. A., Dadds, M. R., & Morris, J. (2000). Promoting secure attachment, maternal mood and child health in a vulnerable population: A randomized controlled trial. *Journal of Paediatrics & Child Health*, 36(6), 555-562.
- Austin, M. P. (2003). Targeted group antenatal prevention of postnatal depression: A review. *Acta Psychiatrica Scandinavica*, 107(4), 244-250.
- Austin, M. P. (2004). Antenatal screening and early intervention for 'perinatal' distress, depression and anxiety: Where to from here? *Archives of Women's Mental Health*, 7(1), 1-6.
- Beck, C. T. (2002). Postpartum depression: A metasynthesis. *Qualitative Health Research*, 12(4), 453-472.
- Beck, C. T. (2001). Predictors of postpartum depression: An update. *Nursing Research*, 50(5), 275-285.
- Beck, C. T. & Gable, R. K. (2001). Further validation of the Postpartum Depression Screening Scale. *Nursing Research*, 50(3), 155-164.
- Beck, C. T. & Gable, R. K. (2001). Comparative analysis of the performance of the Postpartum Depression Screening Scale with two other depression instruments. *Nursing Research*, 50(4), 242-250.
- Beck, C. T. & Gable, R. K. (2000). Postpartum Depression Screening Scale: Development and psychometric testing. *Nursing Research*, 49(5), 272-282.
- Beck, C. T., Reynolds, M. A., & Rutowski, P. (1992). Maternity blues and postpartum depression. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 21(4), 287-293.
- Beck, R. W., Morris, J. B., & Beck, A. T. (1974). Cross-validation of the Suicidal Intent Scale. *Psychological Reports*, 34(2), 445-446.
- Bennet, S. & Indman, P. (2003). *Beyond the blues: A guide to understanding and treating prenatal and postpartum depression*. San Jose, CA: Moodswings Press.
- Benvenuti, P., Ferrara, M., Niccolai, C., Valoriani, V., & Cox, J. L. (1999). The Edinburgh Postnatal Depression Scale: Validation for an Italian sample. *Journal of Affective Disorders*, 53(2), 137-141.
- Bergant, A.M., Nguyen, T., Heim, K., Ulmer, H. & Dapunt, O. (1998). German language version and validation of the Edinburgh Postnatal Depression Scale. *Dtsch Med Wochenschr*, 123(3), 35-40.
- Berggren-Clive, K. (1998). Out of the darkness and into the light: Women's experiences with depression after childbirth. *Canadian Journal of Community Mental Health*, 17(1), 103-120.

- Berkman, L. & Glass, T. (2000). Social integration, social networks, social support, and health. In L. Berkman & I. Kawachi (Eds.), *Social Epidemiology* (pp. 137-173). New York: Oxford University Press.
- Bernazzani, O., Saucier, J.-F., David, H., & Borgeat, F. (1997). Psychosocial predictors of depressive symptomatology level in postpartum women. *Journal of Affective Disorders*, 46(1), 39-49.
- Black, N., Murphy, M., Lamping, D., McKee, M., Sanderson, C., Ashkam, J., et al. (1999). Consensus development methods: Review of best practice in creating clinical guidelines. *Journal of Health Services Research & Policy*, 4(4), 236-248.
- Bloch, M., Schmidt, P. J., Danaceau, M., Murphy, J., Nieman, L., & Rubinow, D. R. (2000). Effects of gonadal steroids in women with a history of postpartum depression. *American Journal of Psychiatry*, 157(6), 924-930.
- Boyce, P., Stubbs, J., & Todd, A. (1993). The Edinburgh Postnatal Depression Scale: Validation for an Australian sample. *Australian & New Zealand Journal of Psychiatry*, 27(3), 472-476.
- Boyce, P. (1994). Personality dysfunction, marital problems and postnatal depression. In J. Cox & J. Holden (Eds.), *Perinatal Psychiatry: Use and misuse of the Edinburgh Postnatal Depression Scale* (pp. 82-102). London: Gaskell.
- Bozoky, I. & Corwin, E. J. (2002). Fatigue as a predictor of postpartum depression. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 31(4), 436-443.
- British Columbia Reproductive Care Program (2003). Reproductive mental illness during the perinatal period. British Columbia Care Program [Electronic version]. Available: <http://www.rcp.gov.bc.ca>.
- Brockington, I. F., Cernik, K. F., Schofield, E. M., Downing, A. R., Francis, A. F., & Keelan, C. (1981). Puerperal psychosis. Phenomena and diagnosis. *Archives of General Psychiatry*, 38(7), 829-833.
- Brugha, T. S., Sharp, H. M., Cooper, S. A., Weisender, C., Britto, D., Shinkwin, R. et al. (1998). The Leicester 500 Project. Social support and the development of postnatal depressive symptoms, a prospective cohort survey. *Psychological Medicine*, 28(1), 63-79.
- Brugha, T. S., Wheatley, S., Taub, N. A., Culverwell, A., Friedman, T., Kirwan, P. et al. (2000). Pragmatic randomized trial of antenatal intervention to prevent post-natal depression by reducing psychosocial risk factors. *Psychological Medicine*, 30(6), 1273-1281.
- Buist, A., Westley, D., & Hill, C. (1999). Antenatal prevention of postnatal depression. *Archives of Women's Mental Health*, 1(4), 167-173.
- Burt, V., Suri, R., Altshuler, L., Stowe, Z., Hendrick, V., & Muntean, E. (2001). Use of psychotropic medication during breastfeeding. *British Journal of Psychiatry*, 158(7), 1001-1009.
- Byrne, A. & Byrne, D.G. (1993). The effect of exercise on depression, anxiety and other mood states: A review. *Journal of Psychosomatic Research*, 37(6), 565-574.
- Cadman, D., Chambers, L., Feldman, W., & Sackett, D. (1984). Assessing the effectiveness of community screening programs. *Journal of the American Medical Association*, 251(12), 1580-1585.
- Callahan, C. M., Hendrie, H. C., Dittus, R. S., Brater, D. C., Hui, S. L., & Tierney, W. M. (1994). Improving treatment of late life depression in primary care: A randomized clinical trial. *Journal of the American Geriatrics Society*, 42(8), 839-846.
- Callahan, C. M., Dittus, R. S., & Tierney, W. M. (1996). Primary care physicians' medical decision making for late-life depression. *Journal of General Internal Medicine*, 11(4), 218-225.
- Campbell, S. B., Cohn, J. F., Flanagan, C., Popper, S., & Meyers, T. (1992). Course and correlates of postpartum depression during the transition to parenthood. *Development and Psychopathology*, 4, 29-47.
- Cannon, C. P. (2003). Treatment algorithms and critical pathways for acute coronary syndromes. *Seminars in Vascular Medicine*, 3(4), 425-432.
- Carpiniello, B., Pariante, C. M., Serri, F., Costa, G., & Carta, M. G. (1997). Validation of the Edinburgh Postnatal Depression Scale in Italy. *Journal of Psychosomatic Obstetrics & Gynecology*, 18(4), 280-285.
- Carothers, A.D. & Murray, L. (1990). Estimating psychiatric morbidity by logistic regression: Application to post-natal depression in a community sample. *Psychological Medicine*, 20(3), 695-702.
- Chan, S. W., Levy, V., Chung, T. K., & Lee, D. (2002). A qualitative study of the experiences of a group of Hong Kong Chinese women diagnosed with postnatal depression. *Journal of Advanced Nursing*, 39(6), 571-579.
- Chen, C. H., Tseng, Y. F., Chou, F. H., & Wang, S. Y. (2000). Effects of support group intervention in postnatally distressed women: A controlled study in Taiwan. *Journal of Psychosomatic Research*, 49(6), 395-399.

Interventions for Postpartum Depression

- Chen, C. H., Wu, H. Y., Tseng, Y. F., Chou, F. H., & Wang, S. Y. (1999). Psychosocial aspects of taiwanese postpartum depression phenomenological approach: a preliminary report. *Kaohsiung J Med Sci*, 15(1), 44-51.
- Clifford, C., Day, A., Cox, J., & Werrett, J. (1999). A cross-cultural analysis of the use of the Edinburgh Post-Natal Depression Scale (EPDS) in health visiting practice. *Journal of Advanced Nursing*, 30(3), 655-664.
- Co, J. P., Johnson, K. B., Duggan, A. K., Casella, J. F., & Wison, M. (2003). Does a clinical pathway improve the quality of care for sickle cell anemia? *Joint Commission Journal on Quality and Safety*, 29(4), 181-190.
- Cogill, S. R., Caplan, H. L., Alexandra, H., Robson, K. M., & Kumar, R. (1986). Impact of maternal postnatal depression on cognitive development of young children. *British Medical Journal Clinical Research Ed.*, 292(6529), 1165-1167.
- Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- Cohen, S., Underwood, L., & Gottlieb, B. (2002). *Social support measurement and intervention: A guide for health and social scientists*. New York: Oxford University Press.
- College of Nurses of Ontario (2004). *CNO practice guideline: professional standards revised*. Toronto, Ontario.
- Cooper, P. & Murray, L. (1997). Prediction, detection, and treatment of postnatal depression. *Archives of Disease in Childhood*, 77(2), 97-99.
- Cooper, P. J., Campbell, E. A., Day, A., Kennerley, H., & Bond, A. (1988). Non-psychotic psychiatric disorder after childbirth. A prospective study of prevalence, incidence, course and nature. *British Journal of Psychiatry*, 152, 799-806.
- Cooper, P. J. & Murray, L. (1995). Course and recurrence of postnatal depression. Evidence for the specificity of the diagnostic concept. *British Journal of Psychiatry*, 166(2), 191-195.
- Cooper, P. J. & Murray, L. (1998). Postnatal depression. *British Medical Journal*, 316(7148), 1884-1886.
- Cooper, P. J., Murray, L., Wilson, A., & Romaniuk, H. (2003). Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression. I. Impact on maternal mood. *British Journal of Psychiatry*, 182, 412-419.
- Cotton, C. R., Peters, D. K., & Range, L. M. (1995). Psychometric properties of the Suicidal Behaviors Questionnaire. *Death Studies*, 19(4), 391-397.
- Cox & Holden (2003). *Perinatal mental health. A Guide to the Edinburgh Postnatal Depression Scale*. (EPDS ed.) London: Gaskell.
- Cox, J. L. (1983). Postnatal depression: A comparison of African and Scottish women. *Social Psychiatry*, 18(1), 25-28.
- Cox, J. L., Holden, J. M., & Sagovsky, R. (1987). Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782-786.
- Cox, J. L., Murray, D., & Chapman, G. (1993). A controlled study of the onset, duration and prevalence of postnatal depression. *British Journal of Psychiatry*, 163, 27-31.
- Cummings, E. M. & Davies, P. T. (1994). Maternal depression and child development. *Journal of Child Psychology and Psychiatry*, 35(1), 73-112.
- Cutrona, C. E. (1989). Ratings of social support by adolescents and adult informants: Degree of correspondence and prediction of depressive symptoms. *Journal of Personality & Social Psychology*, 57(4), 723-730.
- Davies, B. & Edwards, N. (2004). RNs measure effectiveness of best practice guidelines. *Registered Nurses Journal*, 16(1), 21-23.
- Dennis, C-L. (2003a). The detection, prevention, and treatment of postpartum depression. In D. Stewart, E. Robertson, C.-L. Dennis, S. Grace, & T. Wallington (Eds.), *Postpartum depression: Critical literature review and recommendations*. Toronto: Toronto Public Health.
- Dennis, C-L. (2003b). The effect of peer support on postpartum depression: A pilot randomized controlled trial. *Canadian Journal of Psychiatry*, 48(2), 115-124.
- Dennis, C-L. (2003c). Peer support within a health care context: A concept analysis. *International Journal of Nursing Studies*, 40(3), 321-332.
- Dennis, C-L. (2004a). Can we identify mothers at risk for postpartum depression in the immediate postpartum period using the Edinburgh Postnatal Depression Scale? *Journal of Affective Disorders*, 78(2), 163-169.
- Dennis, C-L. (2004b). Preventing postpartum depression part II: A critical review of nonbiological interventions. *Canadian Journal of Psychiatry*, 49(8), 526-538.
- Dennis, C-L. (2004c). Treatment of postpartum depression, part 2: A critical review of nonbiological interventions. *Journal of Clinical Psychiatry*, 65(9), 1252-1265.

- Dennis, C-L. & Creedy, D. (2004). Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database of Systematic Reviews*, (4), CD001134.
- des Rivieres-Pigeon, C., Seguin, L., Brodeur, J. M., Perreault, M., Boyer, G., Colin, C. et al. (2000). The Edinburgh Postnatal Depression Scale: The validity of its Quebec version for a population low socioeconomic status mothers. *Canadian Journal of Community Mental Health*, 19(1), 201-214.
- Dowrick, C. (1995). Does testing for depression influence diagnosis or management by general practitioners? *Family Practice*, 12 (4), 461-465.
- Duffy, C. L. (1983). Postpartum depression: Identifying women at risk. *Genesis*, 11, 21.
- Dunnewold, A. (1997). *Evaluation & treatment of postpartum emotional disorders (Practitioner's Resource Series)*. Florida: Professional Resource Press.
- Dunnewold, A. & Sanford, D. (1994). *Postpartum survival guide: It wasn't supposed to be like this*. California: New Harbinger Publications.
- Eberhard-Gran, M., Eskild, A., Tambs, K., Schei, B., & Opjordsmoen, S. (2001). The Edinburgh Postnatal Depression Scale: Validation in a Norwegian community sample. *Nordic Journal of Psychiatry*, 55(2), 113-117.
- Eberhard-Gran, M., Eskild, A., Tambs, K., Opjordsmoen, S., & Samuelsen, S. O. (2001). Review of validation studies of the Edinburgh Postnatal Depression Scale. *Acta Psychiatrica Scandinavica*, 104(4), 243-249.
- Edwards, N., Murphy, M., Moyer, A. & Wright, A. (1995). Building and sustaining collective health action: A framework for community health practitioners. Ottawa: Community Health Research Unit, University of Ottawa.
- Elliott, S. A. & Leverton, T. J. (2000). Is the EPDS a magic wand?: 2. 'Myths' and the evidence base. *Journal of Reproductive and Infant Psychology*, 18(4), 297-307.
- Errante, J. (1985). Sleep deprivation or postpartum blues? *Topics in Clinical Nursing*, 6(4), 9-18.
- Evins, G. G., Theofrastous, J. P., & Galvin, S. L. (2000). Postpartum depression: A comparison of screening and routine clinical evaluation. *American Journal of Obstetrics & Gynecology*, 182(5), 1080-1082.
- Field, M. & Lohr, K. N. (1990). *Guidelines for clinical practice: Directions for a new program* Washington DC: Institute of Medicine: National Academy Press.
- Fleming, A. S., Klein, E., & Corter, C. (1992). The effects of a social support group on depression, maternal attitudes and behavior in new mothers. *Journal of Child Psychology & Psychiatry*, 33(4), 685-698.
- Georgiopoulos, A. M., Bryan, T. L., Yawn, B. P., Houston, M. S., Rummans, T. A., & Therneau, T. M. (1999). Population-based screening for postpartum depression. *Obstetrics & Gynecology*, 93(5:Pt 1), 653-657.
- Ghubash, R., Abou-Saleh, M. T., & Daradkeh, T. K. (1997). The validity of the Arabic Edinburgh Postnatal Depression Scale. *Social Psychiatry & Psychiatric Epidemiology*, 32(8), 474-476.
- Gilbody, S., Whitty, P., Grimshaw, J., & Thomas, R. (2003). Educational and organizational interventions to improve the management of depression in primary care. *JAMA*, 289(23), 3145-3151.
- Goodman, J. H. (2004). Postpartum depression beyond the early postpartum period. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 33(4), 410-420.
- Guedeney, N. & Fermanian, J. (1998). Validation study of the French version of the Edinburgh Postnatal Depression Scale (EPDS): New results about use and psychometric properties. *European Psychiatry*, 13(2), 83-89.
- Hale, T. W. (2004). *Medications and mother's milk*. Amarillo, TX: Pharmasoft Publishing.
- Hannah, P., Adams, D., Lee, A., Glover, V., & Sandler, M. (1992). Links between early post-partum mood and post-natal depression. *British Journal of Psychiatry*, 160, 777-780.
- Harris, B., Huckle, P., Thomas, R., Johns, S., & Fung, H. (1989). The use of rating scales to identify post-natal depression. *British Journal of Psychiatry*, 154, 813-817.
- Harris, B. (1994). Biological and hormonal aspects of postpartum depressed mood. *British Journal of Psychiatry*, 164, 288-292.
- Haug, M. R., Wykle, M. L., & Namazi, K. H. (1989). Self-care among older adults. *Social Science Medicine*, 29(2), 171-183.
- Health Canada (2004). Supporting self-care: The contribution of nurses and physicians. Health Canada, Health Care Network [Electronic version]. Available: <http://www.hc-sc.gc.ca/hppb/healthcare/pubs/selfcare/ch1en.htm>.
- Health and Welfare Canada (1996). Achieving health for all: A framework for health promotion, Ottawa, Canada.

Interventions for Postpartum Depression

- Hipwell, A. E., Goossens, F. A., Melhuish, E. C., & Kumar, R. (2000). Severe maternal psychopathology and infant-mother attachment. *Development and Psychopathology*, 12(2), 157-175.
- Holden, J. M. (1991). Postnatal depression: Its nature, effects, and identification using the Edinburgh Postnatal Depression scale. *Birth*, 18(4), 211-221.
- Holden, J. (1994). Using the Edinburgh Postnatal Depression Scale in clinical practice. In J. Cox & J. Holden (Eds.), *Perinatal Psychiatry: Use and Misuse of the Edinburgh Postnatal Depression Scale*. London: Gaskell.
- Holden, J. (1996). The role of health visitors in postnatal depression. *International Review of Psychiatry*, 8, 79-86.
- Holden, J. M., Sagovsky, R., & Cox, J. L. (1989). Counselling in a general practice setting: Controlled study of health visitor intervention in treatment of postnatal depression. *British Medical Journal*, 298 (6668), 223-226.
- Holroyd, E., Katie, F. K., Chun, L. S., & Ha, S. W. (1997). "Doing the month": an exploration of postpartum practices in Chinese women. *Health Care International*, 18(3), 301-313.
- Honey, K. L., Bennett, P., & Morgan, M. (2002). A brief psycho-educational group intervention for postnatal depression. *British Journal of Clinical Psychology*, 41(4), 405-409.
- Hostetter, A., Zachary, B., Stowe, N., Strader, J., McLaughlin, E., & Llewellyn, A. (2000). Dose of selective serotonin uptake inhibitors across pregnancy: clinical implications. *Depression and Anxiety*, 11(), 51-57.
- Hostetter, A. L. & Stowe, Z. N. (2002). Postpartum mood disorders. Identification and treatment. In F. Lewis-Hall, T. S. Williams, J. A. Panetta, & J. M. Herrera (Eds.), *Psychiatric illness in women. Emerging treatments and research*. Washington, DC: American Psychiatric Publishing Inc.
- Hundt, G. L., Beckerleg, S., Kassem, F., Abu Jafar, A., Belmaker, I., Abu Saa, K. et al. (2000). Women's health custom made: Building on the 40 days postpartum for Arab women. *Health Care Women International*, 21(6), 529-542.
- Jadresic, E., Araya, R., & Jara, C. (1995). Validation of the Edinburgh Postnatal Depression Scale (EPDS) in Chilean postpartum women. *Journal of Psychosomatic Obstetrics & Gynecology*, 16(4), 187-191.
- Johnstone, A. & Goldberg, D. (1976). Psychiatric screening in general practice. A controlled trial. *Lancet*, 1(7960), 605-608.
- Joiner, T. E., Rudd, M. D., & Rajab, M. H. (1997). The Modified Scale for Suicidal Ideation: Factors of suicidality and their relation to clinical and diagnostic variables. *Journal of Abnormal Psychology*, 106(2), 260-265.
- Katon, W. J., Von Korff, M., Lin, E. H., Simon, G., Ludman, E., Russo, J. et al. (2004). The pathways study: a randomized trial of collaborative care in patients with diabetes and depression. *Archives of General Psychiatry*, 61(10), 1042-1049.
- Kaewern, P., Moyle, W., & Creedy, D. (2003). Traditional postpartum practices among thai women. *Journal of Advanced Nursing*, 41(4), 358-366.
- Kemper, D. W., Lorig, K., & Mettler, M. (1993). The effectiveness of medical self-care interventions: a focus on self-initiated responses to symptoms. *Patient Education & Counselling*, 21(1-2), 29-39.
- Kendall-Tackett, K. A. (2005). *Depression in new mothers: Causes, consequences, and treatment alternatives*. Toronto: University of Toronto Press.
- Kendell, R. E., Chambers, J. C., & Platz, C. (1987). Epidemiology of puerperal psychoses. *British Journal of Psychiatry*, 150, 662-673.
- Kennerley, H. & Gath, D. (1989). Maternity blues. I. Detection and measurement by questionnaire. *British Journal of Psychiatry*, 155(Sep.), 356-362.
- Kleiman, K. & Raskin, V. (1994). *This isn't what I expected: Overcoming postpartum depression*. New York: Bantam Books.
- Klier, C. M., Muzik, M., Rosenblum, K. L., & Lenz, G. (2001). Interpersonal psychotherapy adapted for the group setting in the treatment of postpartum depression. *Journal of Psychotherapy Practice & Research*, 10(2), 124-131.
- Koslowsky, M., Bleich, A., Greenspoon, A., Wagner, B., Apter, A., & Solomon, Z. (1991). Assessing the validity of the Plutchik Suicide Risk Scale. *Journal of Psychiatric Research*, 25(4), 155-158.
- Koval, K. J., Chen, A. L., Aharonoff, G. B., Egol, K. A., & Zuckerman, J. D. (2004). Clinical pathway for hip fractures in the elderly: The hospital for joint diseases experience. *Clin Orthop.*, 425, 72-81.
- Kumar, R. (1994). Postnatal mental illness: A transcultural perspective. *Social Psychiatry & Psychiatric Epidemiology*, 29(6), 250-264.
- Lane, A., Keville, R., Morris, M., Kinsella, A., Turner, M., & Barry, S. (1997). Postnatal depression and elation among mothers and their partners: Prevalence and predictors. *British Journal of Psychiatry*, 171, 550-555.

- Lawrie, T. A., Hofmeyr, G. J., de Jager, M., & Berk, M. (1998). Validation of the Edinburgh Postnatal Depression Scale on a cohort of South African women. *South African Medical Journal*, 88(10), 1340-1344.
- Leathers, S. J., Kelley, M. A., & Richman, J. A. (1997). Postpartum depressive symptomatology in new mothers and fathers: parenting, work and support. *Journal of nervous and mental disease*, 185(3), 129-139.
- Lee, D. T., Yip, S. K., Chiu, H. F., Leung, T. Y., Chan, K. P., Chau, I. O. et al. (1998). Detecting postnatal depression in Chinese women. Validation of the Chinese version of the Edinburgh Postnatal Depression Scale.[see comment]. *British Journal of Psychiatry*, 172, 433-437.
- Linn, L. S. & Yager, J. (1980). The effect of screening, sensitization, and feedback on notation of depression. *Journal of Medical Education*, 55(11), 942-949.
- Lumley, J., Austin, M.-P., & Mitchell, C. (2004). Intervening to reduce depression after birth: A systematic review of the randomized trials. *International Journal of Technology Assessment in Health Care*, 20(2), 128-144.
- Lundh, W. & Gyllang, C. (1993). Use of the Edinburgh Postnatal Depression Scale in some Swedish child health care centres. *Scandinavian Journal of Caring Sciences*, 7(3), 149-154.
- MacArthur, C., Winter, H. R., Bick, D. E., Knowles, H., Lilford, R., Henderson, C. et al. (2002). Effects of redesigned community postnatal care on womens' health 4 months after birth: A cluster randomised controlled trial. *Lancet*, 359(9304), 378-385.
- Marcus, S. M., Barry, K. L., Flynn, H. A., Tandon, R., & Greden, J. F. (2001). Treatment guidelines for depression in pregnancy. *International Journal of Gynaecology and Obstetrics*, 72(1), 61-70.
- Matthey, S., Barnett, B. E., & Elliott, A. (1997). Vietnamese and Arabic women's responses to the Diagnostic Interview Schedule (depression) and self-report questionnaires: Cause for concern. *Australian & New Zealand Journal of Psychiatry*, 31(3), 360-369.
- Matthey, S., Barnett, B., Ungerer, J., & Waters, B. (2000). Paternal and maternal depressed mood during the transition to parenthood. *Journal of Affective Disorders*, 60(2), 75-85.
- Matthey, S., Barnett, B., Kavanagh, D.J., & Howie, P. (2001). Validation of the Edinburgh Postnatal Depression Scale for men and comparison of item endorsement with their partners. *Journal of Affective Disorders*, 64(2-3), 175-184.
- Mauthner, N. S. (1997). Postnatal depression: How can midwives help? *Midwifery*, 13(4), 163-171.
- Mauthner, N. S. (1999). "Feeling low and feeling really bad about feeling low": Women's experiences of motherhood and postpartum depression. *Canadian Psychology*, 40, 143-161.
- Mayberry, L. J. & Affonso, D. D. (1993). Infant temperament and postpartum depression: A review. *Health Care for Women International*, 14(2), 201-211.
- McIntosh, J. (1993). The experience of motherhood and the development of depression in the postnatal period. *Journal of Clinical Nursing*, 2(4), 243-249.
- Milgrom, J. e. al. (2000). *Treating postnatal depression. A psychological approach for health care practitioners*. Canada: John Wiley and Sons, Ltd.
- Miller, L. J. Ed. (1999). *Postpartum mood disorders*. Arlington, VA: American Psychiatric Association Publishing Group.
- Mills, E. P., Finchilescu, G., & Lea, S. J. (1995). Postnatal depression – An examination of psychosocial factors. *South African Medical Journal*, 85(2), 99-105.
- Misri, S. (1995). *Shouldn't I be happy? Emotional problems of pregnant and postpartum women*. New York: Free Press.
- Misri, S., Kostaras, X., Fox, D., & Kostaras, D. (2000). The impact of partner support in the treatment of postpartum depression. *Canadian Journal of Psychiatry*, 45(6), 554-558.
- Morgan, M., Matthey, S., Barnett, B., & Richardson, C. (1997). A group programme for postnatally distressed women and their partners. *Journal of Advanced Nursing*, 26(5), 913-920.
- Morris-Rush, J. K., Freda, M. C., & Bernstein, P. S. (2003). Screening for postpartum depression in an inner-city population. *American Journal of Obstetrics & Gynecology*, 188(5), 1217-1219.
- Morse, C. A., Buist, A., & Durkin, S. (2000). First-time parenthood: influences on pre-and postnatal adjustment in fathers and mothers. *J Psychosom Obstet Gynaecol*, 21(2), 109-120.
- Muir-Gray, J. A. (2001). *Evidence-Based Health Care: How to Make Health Policy and Management Decisions*. (2nd ed.) London: Churchill Livingstone.
- Multicultural Perinatal Network. (2004). Depression and anxiety after birth, Toronto: Toronto Public Health.

Interventions for Postpartum Depression

- Murray, L. (1992). The impact of postnatal depression on infant development. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 33(3), 543-561.
- Murray, L. & Carothers, A.D. (1990). The validation of the Edinburgh Post-natal Depression Scale on a community sample. *British Journal of Psychiatry*, 157, 288-90.
- Murray, L., Fiori-Cowley, A., Hooper, R., & Cooper, P. (1996). The impact of postnatal depression and associated adversity on early mother-infant interactions and later infant outcome. *Child Development*, 67(5), 2512-2526.
- Murray, L., Sinclair, D., Cooper, P., Ducournau, P., Turner, P., & Stein, A. (1999). The socioemotional development of 5-year-old children of postnatally depressed mothers. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 40(8), 1259-1271.
- Murray, L. & Carothers, A. D. (1990). The validation of the Edinburgh Post-natal Depression Scale on a community sample. *British Journal of Psychiatry*, 157, 288-290.
- Murray, D. & Cox, J. (1990). Screening for depression during pregnancy with the Edinburgh Postnatal Depression Scale (EPDS). *Journal of Reproductive and Infant Psychology* 8:63-65.
- Nahas, V. & Amasheh, N. (1999). Culture care meanings and experiences of postpartum depression among Jordanian Australian women: A transcultural study. *Journal of Transcultural Nursing*, 10(1), 37-45.
- Nahas, V. L., Hillege, S., & Amasheh, N. (1999). Postpartum depression. The lived experiences of Middle Eastern migrant women in Australia. *Journal of Nurse-Midwifery*, 44(1), 65-74.
- National Health and Medical Research Council (1998). A guide to the development, implementation and evaluation of clinical practice guidelines. National Health and Medical Research Council [Electronic Version]. Available: www.ausinfo.gov/general/gen_hottobuy.htm
- Newton, M. (2003). Integrated care pathway: The prevention management of pressure ulcers. *J Tissue Viability*, 13(3), 126-129.
- Nicolson, P. (1999). Loss, happiness and postpartum depression: The ultimate paradox. *Canadian Psychology*, 40, 162-178.
- Nonacs, R. & Cohen, L. S. (1998). Postpartum mood disorders: Diagnosis and treatment guidelines. *Journal of Clinical Psychiatry*, 59, Suppl 2, 34-40.
- O'Hara, M. W., Rehm, L. P., & Campbell, S. B. (1983). Postpartum depression. A role for social network and life stress variables. *Journal of Nervous & Mental Disease*, 171(6), 336-341.
- O'Hara, M. W., Neunaber, D. J., & Zekoski, E. M. (1984). Prospective study of postpartum depression: Prevalence, course, and predictive factors. *Journal of Abnormal Psychology*, 93(2), 158-171.
- O'Hara, M. W., Schlechte, J. A., Lewis, D. A., & Varner, M. W. (1991a). Controlled prospective study of postpartum mood disorders: Psychological, environmental, and hormonal variables. *Journal of Abnormal Psychology*, 100(1), 63-73.
- O'Hara, M. W., Schlechte, J. A., Lewis, D. A., & Wright, E. J. (1991b). Prospective study of postpartum blues. Biologic and psychosocial factors. *Archives of General Psychiatry*, 48(9), 801-806.
- O'Hara, M. W. (1994). *Postpartum depression: Causes and consequences*. New York: Springer-Verlag.
- O'Hara, M. W. & Swain, A. M. (1996). Rates and risk of postpartum depression – A meta-analysis. *International Review of Psychiatry*, 8(1), 37-54.
- O'Hara, M. W., Stuart, S., Gorman, L. L., & Wenzel, A. (2000). Efficacy of interpersonal psychotherapy for postpartum depression. *Archives of General Psychiatry*, 57(11), 1039-1045.
- Ogrodniczuk, J. S. & Piper, W. E. (2003). Preventing postnatal depression: A review of research findings. *Harvard Review of Psychiatry*, 11(6), 291-307.
- Okano, T., Nomura, J., Kumar, R., Kaneko, E., Tamaki, R., Hanafusa, I. et al. (1998). An epidemiological and clinical investigation of postpartum psychiatric illness in Japanese mothers. *Journal of Affective Disorders*, 48(2-3), 233-240.
- Osman, A., Gutierrez, P. M., Kopper, B. A., Barrios, F. X., & Chiros, C. E. (1998). The positive and negative suicide ideation inventory: Development and validation. *Psychological Reports*, 82(3 pt 1), 783-793.
- Pacific Postpartum Support Society (2001). *Postpartum depression and anxiety: A self-help guide for mothers*. British Columbia, Canada: (604-255-7999).
- Padula, C. A. (1992). Self-care and the elderly: review and implications. *Public Health Nursing*, 9(1), 22-28.
- Paffenbarger, R. (1982). Epidemiological aspects of mental illness associated with childbearing. In I. F. Brockington & R. Kumar (Eds.), *Motherhood and Mental Illness*. London: Academic Press.
- Parse, R. R. (1998). *The human becoming school of thought*. Thousand Oaks, CA: Sage.

- Paxton, R., Shrubb, S., Griffiths, H., Cameron, L., & Maunder, L. (2000). Tiered approach: Matching mental health services to needs. *Journal of Mental Health, 9*(2), 137-144.
- Paykel, E. S., Emms, E. M., Fletcher, J., & Rassaby, E. S. (1980). Life events and social support in puerperal depression. *British Journal of Psychiatry, 136*, 339-346.
- Pignone, M. P., Gaynes, B. N., Rushton, J. L., Burchell, C. M., Orleans, C. T., Mulrow, C. D. et al. (2002). Screening for depression in adults: A summary of the evidence for the U.S. Preventive Services Task Force. *Annals of Internal Medicine, 136*(10), 765-776.
- Placksin, S. (2000). *Mothering the new mother: Women's feelings and needs after childbirth – a support and resource guide*. New York: Newmarket Press.
- Pop, V. J., Komprou, I. H., & Van Son, M. J. (1992). Characteristics of the Edinburgh Post Natal Depression Scale in The Netherlands. *Journal of Affective Disorders, 26*(2), 105-110.
- Pugh, L. C., Milligan, R., Parks, P., Lenz, E., & Kitzman, H. (1999). Clinical approaches in the assessment of childbearing fatigue. *Journal of Obstetric, Gynecologic and Neonatal Nursing 28*(1), 74-80.
- Registered Nurses' Association of Ontario (2002a). *Crisis intervention: nursing best practice guideline*. Toronto: Registered Nurses' Association of Ontario.
- Registered Nurses' Association of Ontario (2002b). *Establishing therapeutic relationships: Nursing best practice guideline*. Toronto: Registered Nurses' Association of Ontario.
- Registered Nurses' Association of Ontario (2002c). *Supporting and strengthening families through expected and unexpected life events: Nursing best practice guideline*. Toronto: Registered Nurses' Association of Ontario.
- Registered Nurses' Association of Ontario (2002d). *Toolkit: Implementation of clinical practice guidelines*. Toronto: Registered Nurses' Association of Ontario.
- Regmi, S., Sligl, W., Carter, D., Grut, W. & Seear, M. (2002). A controlled study of postpartum depression among Nepalese women: Validation of the Edinburgh Postpartum Depression scale in Kathmandu. *Tropical Medicine & International Health, 7*(4), 378-82.
- Reifler, D. R., Kessler, H. S., Bernhard, E. J., Leon, A. C., & Martin, G. J. (1996). Impact of screening for mental health concerns on health service utilization and functional status in primary care patients. *Archives of Internal Medicine, 156*(22), 2593-2599.
- Reighard, F. T. & Evans, M. L. (1995). Use of the Edinburgh Postnatal Depression Scale in a southern, rural population in the United States. *Prog Neuropsychopharmacol Biol Psychiatry, 19*(7), 1219-1224.
- Righetti-Veltema, M., Conne-Perreard, E., Bousquet, A., & Manzano, J. (1998). Risk factors and predictive signs of postpartum depression. *Journal of Affective Disorders, 49*(3), 167-180.
- Ritter, C., Hobfoll, S. E., Lavin, J., Cameron, R. P., & Hulsizer, M. R. (2000). Stress, psychosocial resources, and depressive symptomatology during pregnancy in low-income, inner-city women. *Health Psychology, 19*(6), 576-585.
- Robertson, E., Grace, S., Wallington, T., & Stewart, D. E. (2004). Antenatal risk factors for postpartum depression: A synthesis of recent literature. *General Hospital Psychiatry, 26*(4), 289-295.
- Rodrigues, M., Patel, V., Jaswal, S., & de Souza, N. (2003). Listening to mothers: Qualitative studies on motherhood and depression from Goa, India. *Social Science Medicine, 57*(10), 1797-1806.
- Romito, P., Saurel-Cubizolles, M. J., & Lelong, N. (1999). What makes new mothers unhappy: Psychological distress one year after birth in Italy and France. *Social Science & Medicine, 49*(12), 1651-1661.
- Rosenberg, R., Greening, D., & Windell, J. (2003). *Conquering postpartum depression: A proven plan for recovery*. Cambridge, MA: Perseus Publishing.
- Ross, L., Dennis, C-L., Robertson, E., & Stewart, D. E. (2005). *Postpartum depression: A guide for front-line health and social service providers*. Toronto: Centre for Addiction and Mental Health.
- Ross, L. E., Gilbert Evans, S. E., Sellers, E. M., & Romach, M. K. (2003). Measurement issues in postpartum depression part 2: Assessment of somatic symptoms using the Hamilton Rating Scale for Depression. *Archives of Women's Mental Health, 6*(1), 59-64.
- Roy, A., Gang, P., Cole, K., Rutsky, M., Reese, L., & Weisbord, J. A. (1993). Use of Edinburgh Postnatal Depression Scale in a North America Population. *Prog Neuropsychopharmacol Biol Psychiatry, 17*(3), 501-504.
- Rycroft-Malone, J., Kitson, A., Harvey, G., McCormack, B., Seers, K., Titcher, A. et al. (2002). Ingredients for change: Revisiting a conceptual framework. *Quality & Safety in Health Care, 11*(2), 174-180.

Interventions for Postpartum Depression

- Sackett, D. L. (1987). Screening in family practice: Prevention, levels of evidence, and the pitfalls of common sense. *Journal of Family Practice*, 24(3), 233-234.
- Scottish Intercollegiate Guidelines Network (2002). *Postnatal depression and puerperal psychosis: A national clinical guideline*. Scotland, Scottish Intercollegiate Guidelines Network.
- Sebastian, L. (1998). *Overcoming postpartum depression & anxiety*. Omaha, NE: Addicus Books.
- Seeley, S., Murray, L., & Cooper, P. (1996). The outcomes for mothers of babies of health visitor intervention. *The Health Visitor*, 69(4), 135-138.
- Semprevio, D. M. (1996). The lived experience of postpartum mental illness. Ref Type: Unpublished Work.
- Sidani, S. (2004). Rethinking the research-practice gap: Relevance of the RCT to practice. *Canadian Journal Nursing Research*, 36(3), 7-18.
- Sheehan, D.V., Lecrubier, Y., Harnett-Sheehan, K., Amorim, P., Janvas, J., Hergueta, T., Baker, R. & Dunbar, G. (1998). The Mini International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic interview. *Journal of Clinical Psychiatry*, 59(suppl 20), 22-33.
- Small, R., Brown, S., Lumley, J., & Astbury, J. (1994). Missing voices: What women say and do about depression after childbirth. *Journal of Reproductive & Infant Psychology*, 12, 19-22.
- Stamp, G. E., Williams, A. S., & Crowther, C. A. (1995). Evaluation of antenatal and postnatal support to overcome postnatal depression: A randomized, controlled trial. *Birth*, 22(3), 138-143.
- Steinberg, S. I. & Bellavance, F. (1999). Characteristics and treatment of women with antenatal and postpartum depression. *International Journal of Psychiatry in Medicine*, 29(2), 209-233.
- Stern, G. & Kruckman, L. (1983). Multi-disciplinary perspectives on post-partum depression: An anthropological critique. *Social Science of Medicine*, 17, 1027-1041.
- Stewart, D. E., Robertson, E., Dennis, C-L. & Wallington, T. (2003). *Postpartum depression: Literature review of risk factors and interventions*: Toronto, Toronto Public Health.
- Stuart, S. & O'Hara, M. W. (1995). Interpersonal psychotherapy for postpartum depression. A treatment program. *Journal of Psychotherapy Practice & Research*, 4(1), 18-29.
- Stuart, S., Couser, G., Schilder, K., O'Hara, M. W., & Gorman, L. (1998). Postpartum anxiety and depression: Onset and comorbidity in a community sample. *Journal of Nervous & Mental Disease*, 186(7), 420-424.
- Suri, R., Stowe, Z., Hendrick, V., Hostetter, A., Widawski, M., & Altshuler, L. (2002). Estimates of nursing infant daily does to fluoxetine through breast milk. *Biological Psychiatry*, 52, 446-451.
- Thome, M. (2000). Predictors of postpartum depressive symptoms in Icelandic women. *Archives of Women's Mental Health*, 3, 7-14.
- Thompson, W. M., Harris, B., Lazarus, J., & Richards, C. (1998). A comparison of the performance of rating scales used in the diagnosis of postnatal depression. *Acta Psychiatrica Scandinavica*, 98(3), 224-227.
- Ugariza, D. N. (2002). Postpartum depressed women's explanation of depression. *Journal of Nursing Scholarship*, 34(3), 227-233.
- Watson, J. P., Elliott, S. A., Rugg, A. J., & Brough, D. I. (1984). Psychiatric disorder in pregnancy and the first postnatal year. *British Journal of Psychiatry*, 144, 453-462.
- Watt, S., Sword, W., Krueger, P., Sheehan, D. (2002). A cross-sectional study of early identification of postpartum depression: Implications for primary care providers from The Ontario Mother & Infant Survey. *BMC Family Practice*, 3(1), 5.
- Wells, K. B., Sherbourne, C., Schoenbaum, M., Duan, N., Meredith, L., Unutzer, J. et al. (2000). Impact of disseminating quality improvement programs for depression in managed primary care: A randomized controlled trial. *Journal of the American Medical Association*, 283(2), 212-220.
- Whiffen, V. E. & Gotlib, I. H. (1989). Infants of postpartum depressed mothers: Temperament and cognitive status. *Journal of Abnormal Psychology*, 98(3), 274-279.
- Whooley, M. A., Stone, B., & Soghikian, K. (2000). Randomized trial of case-finding for depression in elderly primary care patients. *Journal of General Internal Medicine*, 15(5), 293-300.
- Wickberg, B. & Hwang, C. P. (1996a). The Edinburgh Postnatal Depression Scale: Validation on a Swedish community sample. *Acta Psychiatrica Scandinavica*, 94(3), 181-184.

- Wickberg, B. & Hwang, C. P. (1996b). Counselling of postnatal depression: A controlled study on a population based Swedish sample. *Journal of Affective Disorders*, 39(3), 209-216.
- Williams, J., Mulrow, C., Kroenke, K., Dhanda, R., Badgett, R., Omori, D. et al. (1999). Case-finding for depression in primary care: A randomized trial. *American Journal of Medicine*, 106(1), 36-43.
- Wilson, J. & Junger, G. (1968). *Principles in practice when screening for disease*. Geneva: World Health Organization.
- Wisner, K. L., Parry, B. L., & Piontek, C. M. (2002). Clinical practice. Postpartum depression. *New England Journal of Medicine*, 347(3), 194-199.
- World Health Organization (1993). *The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines*. Geneva: World Health Organization.
- Yamashita, H., Yoshida, K., Nakano, H., & Tashiro, N. (2000). Postnatal depression in Japanese women. Detecting the early onset of postnatal depression by closely monitoring the postpartum mood. *Journal of Affective Disorders*, 58(2), 145-154.
- Yoshida, K., Yamashita, H., Ueda, M. & Tashiro, N. (2001). Postnatal depression in Japanese mothers and the reconsideration of "satogaeri bunben". *Pediatrics International*, 43(2), 189-193.
- Zelkowitz, P. & Milet, T. H. (1995). Screening for post-partum depression in a community sample. *Canadian Journal of Psychiatry*, 40(2), 80-86.
- Zuckerman, B. & Lubin, B. (1985). *Manual of multiple affect adjective check list revised*. Sandiego: EDITS.
- Zung, W. W. & King, R. E. (1983). Identification and treatment of masked depression in a general medical practice. *Journal of Clinical Psychiatry*, 44(10), 365-368.

Bibliography

- A midwife-led debriefing session after operative childbirth did not reduce postpartum depression (2001). *ACP Journal Club*, 134(3), 86.
- Postnatal depression is not adequately treated (2002). *Practising Midwife*, 5(9), 9.
- Social support measurement and intervention: A guide for health and social scientists* (2002). New York: Oxford University Press.
- A review of the literature on debriefing or non-directive counselling to prevent postpartum emotional distress (2002). *Midwifery*, 18, 72-79.
- Affonso, D. D., Lovett, S., Paul, S. M., & Sheptak, S. (1990). A standardized interview that differentiates pregnancy and postpartum symptoms from perinatal clinical depression. *Birth*, 17(3), 121-130.
- Alder, E. & Truman, J. (2002). Counselling for postnatal depression in the voluntary sector. *Psychology & Psychotherapy: Theory, Research & Practice*, 75(2), 207-220.
- Appleby, L., Gregoire, A., Platz, C., Prince, M., & Kumar, R. (1994). Screening women for high risk of postnatal depression. *Journal of Psychosomatic Research*, 38(6), 539-545.
- Appleby, L., Warner, R., Whitton, A., & Faragher, B. (1997). Fluoxetine vs counselling for postnatal depression. *New Zealand Medical Journal*, 110(1046), 221.
- Arentsen, K. (1968). Postpartum psychoses with particular reference to the prognosis. *Danish Medical Bulletin*, 15(4), 97-100.
- Armstrong, K. & Edwards, H. (2003). The effects of exercise and social support on mothers reporting depressive symptoms: A pilot randomized controlled trial. *International Journal of Mental Health Nursing*, 12(2), 130-138.
- Attia, E., Downey, J., & Oberman, M. (1999). Postpartum psychoses. In L. J. Miller (Ed.), *Postpartum Mood Disorders*. London, England: American Psychiatric Press.
- Austin, M., (2003). Psychosocial assessment and management of depression and anxiety in pregnancy: Key aspects of antenatal care for general practice. *Australian Family Physician*, 32(3), 119-120.

Interventions for Postpartum Depression

- Austin, M. P. & Lumley, J. (2003). Antenatal screening for postnatal depression: A systematic review. *Acta Psychiatrica Scandinavica*, 107(1), 10-17.
- AWHONN (1999). Postpartum depression: clinical position statement. Association of Women's Health, Obstetric and Neonatal Nurses Symposium: Postpartum Depression: Case Studies, Research and Nursing Care [Electronic version]. Available: <http://www.awhonn.org/awhonn/?pg=873-6230-7000-4730-4770>.
- Bagedahl-Strindlund, M. & Monsen, B. K. (1998). Postnatal depression: A hidden illness. *Acta Psychiatrica Scandinavica*, 98(4), 272-275.
- Barnett, P. A. & Gotlib, I. H. (1988). Psychosocial functioning and depression: Distinguishing among antecedents, concomitants, and consequences. *Psychological Bulletin*, 104(1), 97-126.
- Bartley, M. (1994). Unemployment and ill health: Understanding the relationship. *Journal of Epidemiology & Community Health*, 48 (4), 333-337.
- Beck, C. T. (1994). The lived experience of postpartum depression: A phenomenological study. *Nursing Research*, 41(3), 166-170.
- Beck, C. T. (1996). A meta-analysis of predictors of postpartum depression. *Nursing Research*, 45(5), 297-303.
- Beck, C. T. (1998). A checklist to identify women at risk for developing postpartum depression. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 27(1), 39-46.
- Beck, C. T. (1999). Postpartum depression. Stopping the thief that steals motherhood. *AWHONN Lifelines*, 3(4), 41-44.
- Beck, C. T. & Gable, R. K. (2003). Postpartum Depression Screening Scale: Spanish version. *Nursing Research*, 52(5), 296-306.
- Beck, C. T. (2003). Recognizing and screening for postpartum depression in mothers of NICU infants. *Advances in Neonatal Care*, 3(1), 37-46.
- Beck, C. T. (2004). Postpartum depressed mothers' experiences interacting with their children. *Nursing Research*, 45(2), 98-104.
- Berle, J. O., Aarre, T. F., Mykletun, A., Dahl, A. A., & Holsten, F. (2003). Screening for postnatal depression – Validation of the Norwegian version of the Edinburgh Postnatal Depression Scale, and assessment of risk factors for postnatal depression. *Journal of Affective Disorders*, 76(1-3), 151-156.
- Bick, D. (2003). Strategies to reduce postnatal psychological morbidity: The role of midwifery services. *Disease Management & Health Outcomes*, 11(1), 11-20.
- Boath, E. & Henshaw, C. (2001). The treatment of postnatal depression: A comprehensive literature review. *Journal of Reproductive & Infant Psychology*, 19(3), 215-248.
- Boyce, P. (2003). Dealing with the patient with postnatal depression. *Medicine Today*, 4(7), 83-85.
- Boyce, P., Hickey, A., Gilchrist, J., & Talley, N. J. (2001). The development of a brief personality scale to measure vulnerability to postnatal depression. *Archives of Women's Mental Health*, 3(4), 147-153.
- Boyce, P. M. & Todd, A. L. (1992). Increased risk of postnatal depression after emergency caesarean section. *Medical Journal of Australia*, 157(3), 172-174.
- Braverman, J. & Roux, J. F. (1978). Screening for the patient at risk for postpartum depression. *Obstetrics & Gynecology*, 52(6), 731-736.
- Bridge, L. R., Little, B. C., Hayworth, J., Dewhurst, J., & Priest, R. G. (1985). Psychometric ante-natal predictors of post-natal depressed mood. *Journal of Psychosomatic Research*, 29(3), 325-331.
- Brockington, I. F. & Cox-Roper, A. (1988). The nosology of puerperal mental illness. In I. F. Brockington & R. Kumar (Eds.), *Motherhood and Mental Illness 2: Causes and Consequences*. London: Wright.
- Brockington, I. F., Margison, F. R., Schofield, E., & Knight, R. J. (1988). The clinical picture of the depressed form of puerperal psychosis. *Journal of Affective Disorders*, 151(1), 29-37.
- Brockington, I. F., Winokur, G., & Dean, C. (1982). *Puerperal psychosis in motherhood and mental illness*. London: Academic Press.
- Brockington, I. F., Martin, C., Brown, G. W., Goldberg, D., & Margison, F. (1990). Stress and puerperal psychosis. *British Journal of Psychiatry*, 157, 331-334.
- Brown, G. W. & Harris, T. (1978). *Social Origins of Depression: A Study of Psychiatric Disorder in Women*. New York: The Free Press.
- Caltabiano, N. J. & Caltabiano, M. L. (1996). Relationship between exhaustion and postnatal depression. *Psychological Reports*, 79, 225-226.

- Campagne, D. M. & Rayburn, W. F. (2003). Screening depressive patients in pregnancy with the pregnancy mood profile. *Journal of Reproductive Medicine for the Obstetrician & Gynecologist*, 48(10), 813-817.
- Chabrol, H. & Teissedre, F. (2004). Relation between Edinburgh Postnatal Depression Scale scores at 2-3 and 4-6 weeks postpartum. *Journal of Reproductive & Infant Psychology*, 22(1), 33-39.
- Chabrol, H., Teissedre, F., Armitage, J., Danel, M., & Walburg, V. (2004). Acceptability of psychotherapy and antidepressants for postnatal depression among newly delivered mothers. *Journal of Reproductive & Infant Psychology*, 22(1), 5-12.
- Chalmers, B. (1988). The Pedit woman's experiences of childbirth and early parenthood: A summary of major findings. *Curationis*, 11(1), 12-19.
- Ciliska, D., Mastrill, P., Ploeg, J., Hayward, S., Brunton, G., & Underwood, J. (1999). The effectiveness of home visiting as a delivery strategy for public health nursing interventions to clients in the prenatal and postnatal period: A systematic review. Hamilton, Ontario.
- Cohen, J. (1977). *Statistical Power Analysis for the Behavioural Sciences*. (Revised ed.) New York: Academic Press.
- College of Nurses of Ontario (1999). *Entry to practice competencies for Ontario registered nurses as of January 1, 2005* (Rep. No. #41037). Toronto, Ontario.
- Collins, N. L., Dunkel-Schetter, C., Lobel, M., & Scrimshaw, S. C. (1993). Social support in pregnancy: Psychosocial correlates of birth outcomes and postpartum depression. *Journal of Personality & Social Psychology*, 65(2), 1243-1258.
- Condon, J. T. & Corkindale, C. J. (1997). The assessment of depression in the postnatal period: A comparison of four self-report questionnaires. *Australian & New Zealand Journal of Psychiatry*, 31(3), 353-359.
- Cooper, P. J., Landman, M., Tomlinson, M., Molteno, C., Swartz, L., & Murray, L. (2002). Impact of a mother-infant intervention in an indigent peri-urban South African context: Pilot study. *British Journal of Psychiatry*, 180, 76-81.
- Cooper, P. J., Murray, L., Hooper, R., & West, A. (1996). The development and validation of a predictive index for postpartum depression. *Psychological Medicine*, 26(3), 627-634.
- Copper, H. (1989). *Integrating research: A guide for literature reviews*. Newbury Park, CA: Sage.
- Cox, J. L. (1989). Postnatal depression: A serious and neglected postpartum complication. *Baillieres Clin Obstet Gynaecol.*, 3(4), 839-855.
- Cox, J. L. (1999). Perinatal mood disorders in a changing culture. A transcultural European and African perspective. *International Review of Psychiatry*, 11, 103-110.
- Cutrona, C. E. (1983). Causal attributions and perinatal depression. *Journal of Abnormal Psychology*, 92(2), 161-172.
- Cutrona, C. E. (1984). Social support and stress in the transition to parenthood. *Journal of Abnormal Psychology*, 93(4), 378-390.
- Da Costa, D., Larouche, J., Dritsa, M., & Brender, W. (2000). Psychosocial correlates of prepartum and postpartum depressed mood. *Journal of Affective Disorders*, 59(1), 31-40.
- Davidson, J. & Robertson, E. (1985). A follow-up study of postpartum illness, 1946-1978. *Acta Psychiatrica Scandinavica*, 71, 451-457.
- Davies, B. R., Howells, S., & Jenkins, M. (2003). Early detection and treatment of postnatal depression in primary care. *Journal of Advanced Nursing*, 44(3), 248-255.
- Dean, C. & Kendell, R. E. (1981). The symptomatology of puerperal illnesses. *British Journal of Psychiatry*, 139, 128-133.
- Deaves, D. (2001). Prevention and management of postnatal depression. *Community Practitioner*, 74(7), 263-267.
- Dennerstein, L., Leher, P., & Riphagen, F. (1989). Postpartum depression – Risk factors. *Journal of Psychosomatic Obstetrics & Gynecology*, 10(Suppl. 2), 53-67.
- des Rivières-Pigeon, C., Saurel-Cubizolles, M.-J., & Lelong, N. (2004). Considering a simple strategy for detection of women at risk of psychological distress after childbirth. *Birth*, 31(1), 34-42.
- Dethieux, J. B., Abadie, I., Grandjean, H., & Raynaud, J. P. (2000). Narcissistic crisis and prediction of post-partum depression: Validation of a self-report questionnaire. [French]. *Encephale*, 26(3), 44-52.
- Dowlatsahi, D. & Paykel, E. S. (1990). Life events and social stress in puerperal psychoses: Absence of effect. *Psychological Medicine*, 20(3), 655-662.
- Dubovsky, S. L. & Buzan, R. (1999). Mood disorders. In R. E. Hales, S. C. Yudofsky, & J. A. Talbotts (Eds.), *Textbook of Psychiatry* (3rd ed.,) Washington, DC: American Psychiatric Press.

Interventions for Postpartum Depression

- Dunkel-Schetter, C. & Bennett, T. L. (1990). Differentiating the cognitive and behavioral aspects of social support. In B. R. Sarason & G. R. Pierce (Eds.), *Social support: An interactive view* (pp. 267-296). New York: Wiley.
- Eastwood, P. (1995). Promoting peer group support with postnatally depressed women. *Health Visit*, 68(4), 148-150.
- Eberhard-Gran, M., Eskild, A., Tambs, K., Samuelsen, S. O., & Opjordsmoen, S. (2002). Depression in postpartum and non-postpartum women: Prevalence and risk factors. *Acta Psychiatrica Scandinavica*, 106(6), 426-433.
- Elkan, R., Kendrick, D., Hewitt, M., Robinson, J., Tolley, K., Blair, M. et al. (2000). The effectiveness of domiciliary health visiting: A systematic review of international studies and a selective review of the British literature. *Health Technology Assessment*, 4(13), 1-339.
- Elliott, S. A., Leverton, T. J., Sanjack, M., Turner, H., Cowmeadow, P., Hopkins, J. et al. (2000). Promoting mental health after childbirth: A controlled trial of primary prevention of postnatal depression. *British Journal of Clinical Psychology*, 39(3), 223-241.
- Evins, G. G. & Theofrastous, J. P. (1997). Postpartum depression: A review of postpartum screening. *Primary Care Update for Ob/Gyns*, 4(6), 241-246.
- Forman, D. N., Videbech, P., Hedegaard, M., Salvig, J. D., & Secher, N. J. (2000). Postpartum depression: Identification of women at risk. *British Journal of Obstetrics & Gynaecology*, 107(10), 1210-1217.
- Fossey, L., Papiernik, E., & Bydlowski, M. (1997). Postpartum blues: A clinical syndrome and predictor of postnatal depression? *Journal of Psychosomatic Obstetrics & Gynecology*, 18(1), 17-21.
- Garcia-Esteve, L., Ascaso, C., Ojuel, J., & Navarro, P. (2003). Validation of the Edinburgh Postnatal Depression Scale (EPDS) in Spanish mothers. *Journal of Affective Disorders*, 75(1), 71-76.
- Gautam, S., Nijhawan, M., & Geholt, P. S. (1982). Postpartum psychiatric syndromes—an analysis of 100 consecutive cases. *Indian Journal of Psychiatry*, 24, 383-386.
- Gibson, E. (1982). *Homicide in England and Wales 1967-1971*. London: Pitman.
- Gjerdingen, D. (2003). The effectiveness of various postpartum depression treatments and the impact of antidepressant drugs on nursing infants. *Journal of the American Board of Family Practice*, 16(5), 372-382.
- Glaze, R. & Cox, J. L. (1991). Validation of a computerised version of the 10-item (self-rating) Edinburgh Postnatal Depression Scale. *Journal of Affective Disorders*, 22(1-2), 73-77.
- Glover, V., Onozawa, K., & Hodgkinson, A. (2002). Benefits of infant massage for mothers with postnatal depression. *Semin Neonatal*, 7(6), 495-500.
- Hamilton, J. A. (1982). The identity of postpartum psychosis. In I. F. Brockington & R. Kumar (Eds.), *Motherhood and Mental Illness* (pp. 1-17). London: Academic Press.
- Hanna, B., Jarman, H., Savage, S., & Layton, K. (2004). The early detection of postpartum depression: Midwives and nurses trial a checklist. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 33(2), 191-197.
- Hapgood, C. C., Elkind, G. S., & Wright, J. J. (1988). Maternity blues: Phenomena and relationship to later post partum depression. *Australian & New Zealand Journal of Psychiatry*, 22(3), 299-306.
- Harris, B. (1996). Hormonal aspects of postnatal depression. *International Review of Psychiatry*, 8, 27-36.
- Hayes, B. A., Muller, R., & Bradley, B. S. (2001). Perinatal depression: A randomized controlled trial of an antenatal education intervention for primiparas. *Birth*, 28(1), 28-35.
- Hays, P. (1978). Taxonomic map of the schizophrenias, with special reference to puerperal psychosis. *British Medical Journal*, 2 (6139), 755-757.
- Hays, P. & Douglass, A. (1984). A comparison of puerperal psychosis and the schizophreniform variant of manic-depression. *Acta Psychiatrica Scandinavica*, 69(3), 177-181.
- Hayworth, J., Little, B. C., Carter, S. B., Raptopoulus, P., Priest, R. G., & Sandler, M. (1980). A predictive study of post-partum depression: Some predisposing characteristics. *British Journal of Medical Psychology*, 53(2), 161-167.
- Hedges, L. V. & Olkin, I. (1985). *Statistical Methods for Meta-analysis*. New York: Academic Press.
- Heh, S. S. & Fu, Y. Y. (2003). Effectiveness of informational support in reducing the severity of postnatal depression in Taiwan. *Journal of Advanced Nursing*, 42(1), 30-36.

- Hendrick, V., Altshuler, L. L., & Suri, R. (1998). Hormonal changes in the postpartum and implications for postpartum depression. *Psychosomatics*, 39(2), 93-101.
- Highet, N. & Drummond, P. (2004). A comparative evaluation of community treatments for post-partum depression: Implications for treatment and management practices. *Australian & New Zealand Journal of Psychiatry*, 38(4), 212-218.
- Hodnett, E. D., Lowe, N. K., Hannah, M. E., Willan, A. R., Stevens, B., Weston, J. A. et al. (2002). Effectiveness of nurses as providers of birth labour support in North American hospitals: A randomized controlled trial. *Journal of the American Medical Association*, 288(11), 1373-1381.
- Holmes, T. H. & Rahe, R. H. (1967). The Social Readjustment Rating Scale. *Journal of Psychosomatic Research*, 11(2), 213-218.
- Holt, W. J. (1995). The detection of postnatal depression in general practice using the Edinburgh Postnatal Depression Scale. *New Zealand Medical Journal*, 108(994), 57-59.
- Hopkins, J., Campbell, S. B., & Marcus, M. (1987). Role of infant-related stressors in postpartum depression. *Journal of Abnormal Psychology*, 96(3), 237-241.
- House, J. S. & Kahn, R. (1985). Measuring social support. In S. Cohen & S. L. Syme (Eds.), *Social Support and Health* (pp. 83-108). Orlando: Academic.
- Jacobsen, T. (1999). Effects of postpartum disorders on parenting and on offspring. In L. J. Miller (Ed.), *Postpartum Mood Disorders* (pp. 119-139). Washington, DC: American Psychiatric Press.
- Jacquemain, F., David, D., & Golse, B. (1998). Research on antenatal predictability of maternal post-partum depression: Creation of an instrument for primary and secondary prevention. [French]. *Annales de Psychiatrie*, 13(2), 124-135.
- Jadresic, E., Jara, C., Miranda, J., Arrau, B., & Araya, R. (1992). Emotional disorders in pregnancy and the puerperium: A prospective study of 108 women. *Rev Chil Neuropsiquiatr*, 30, 99-106.
- Jason, J., Gilliland, J. C., & Tyler, C. W., Jr. (1983). Homicide as a cause of pediatric mortality in the United States. *Pediatrics*, 72, 191-197.
- Jenkins, R. (1985). Sex differences in minor psychiatric morbidity. In *Psychological Medicine*. London (Monograph Suppl. No 7): Cambridge University Press.
- Johnson, J., Wiessman, M. M., & Klerman, G. L. (1992). Service utilization and social morbidity associated with depressive symptoms in the community. *Journal of the American Medical Association*, 267(11), 1478-1483.
- Johnstone, S. J., Boyce, P. M., Hickey, A. R., Morris-Yates, A. D., & Harris, M. G. (2001). Obstetric risk factors for postnatal depression in urban and rural community samples. *Australian & New Zealand Journal of Psychiatry*, 35(1), 69-74.
- Jones, I. & Craddock, N. (2001). Familiality of the puerperal trigger in bipolar disorder: Results of a family study. *American Journal of Psychiatry*, 158(6), 913-917.
- Josefsson, A., Angelsioo, L., Berg, G., Ekstrom, C., Gunnervik, C., Nordin, C. et al. (2002). Obstetric, somatic, and demographic risk factors for postpartum depressive symptoms. *Obstetrics & Gynecology*, 99(2), 223-228.
- Kelly, J. V. (1967). After office hours: The influences of native customs on obstetrics in Nigeria. *Obstetrics & Gynecology*, 30, 608-612.
- Kitamura, T., Sugawara, M., Shima, S., & Toda, M. A. (1999). Temporal variation of validity of self-rating questionnaires: Improved validity of repeated use of Zung's Self-Rating Depression Scale among women during the perinatal period. *Journal of Psychosomatic Obstetrics & Gynecology*, 20(2), 112-117.
- Kleinman, A. (1996). How is culture important for DSM-IV? In J. E. Mezzich & A. Kleinman (Eds.), *Culture and Psychiatric Diagnosis: A DSM-IV Perspective* (pp. 15-25). Washington: American Psychiatric Press.
- Klompshouwer, J. L. & van Hulst, A. M. (1991). Classification of postpartum psychosis: A study of 250 mother and baby admissions in The Netherlands. *Acta Psychiatrica Scandinavica*, 84(3), 255-261.
- Kumar, R., Marks, M., Platz, C., & Yoshida, K. (1995). Clinical survey of a psychiatric mother and baby unit: Characteristics of 100 consecutive admissions. *Journal of Affective Disorders*, 33(1), 11-22.
- Kumar, R. & Robson, K. M. (1984). A prospective study of emotional disorders in childbearing women. *British Journal of Psychiatry*, 144, 35-47.
- Lane, B., Roufeil, L. M., Williams, S., & Tweedie, R. (2001). It's just different in the country: Postnatal depression and group therapy in a rural setting. *Social Work in Health Care*, 34(3-4), 333-348.

Interventions for Postpartum Depression

- Lavender, T. & Walkinshaw, S. A. (1998). Can midwives reduce postpartum psychological morbidity? A randomized trial. *Birth*, 25(4), 215-219.
- Lee, D. (2001). Partner support reduced depressive symptoms in postpartum depression. *Evidence-Based Mental Health*, 4(2):51, 2001 May.(1 ref),2), 51.
- Lee, D. T., Yip, A. S., Chiu, H. F., & Chung, T. K. (2000). Screening for postnatal depression using the double-test strategy. *Psychosomatic Medicine*, 62(2), 258-263.
- Lee, D. T., Yip, A. S., Chan, S. S., Tsui, M. H., Wong, W. S., & Chung, T. K. (2003). Postdelivery screening for postpartum depression. *Psychosomatic Medicine*, 65(3), 357-361.
- Lee, D. T., Yip, A. S., Leung, T. Y., & Chung, T. K. (2000). Identifying women at risk of postnatal depression: Prospective longitudinal study. *Hong Kong Medical Journal*, 6(4), 349-354.
- Lee, K. & Zaffke, M. E. (1999). Longitudinal changes in fatigue and energy during pregnancy and the postpartum period. *JOGNN – Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 28(2), 183-191.
- Llewellyn, A. M., Stowe, Z. N., & Nemeroff, C. B. (1997). Depression during pregnancy and the puerperium. *Journal of Clinical Psychiatry*, 58, Suppl-32.
- Logsdon, M. C., Birkimer, J. C., & Usui, W. M. (2000). The link of social support and postpartum depressive symptoms in African-American women with low incomes. *MCN, American Journal of Maternal Child Nursing*, 25(5), 262-266.
- Lopez-Nahas, V. (2001). An antenatal index predicted postpartum depression with high sensitivity and moderate specificity... commentary on Nielsen Forman D., Videbech P., Hedegaard M., et al. Postpartum depression: Identification of women at risk. *BJOG* 2000 Oct;107:1210-7. *Evidence-Based Nursing*, 4(2), 58.
- Lumley, J. & Austin, M. P. (2001). What interventions may reduce postpartum depression. *Current Opinion in Obstetrics & Gynecology*, 13(6), 605-611.
- MacArthur, C., Winter, H. R., Bick, D. E., Lilford, R. J., Lancashire, R. J., Knowles, H. et al. (2003). Redesigning postnatal care: A randomised controlled trial of protocol-based midwifery-led care focused on individual women's physical and psychological health needs. *Health Technology Assessment*, 7(37), 1-98.
- Manzano, J. M. S. (2003). Review: Antenatal screening tools to predict postnatal depression generally have low specificity and sensitivity. *Evidence-Based Mental Health*, 6(3), 77.
- Marks, M. N., Siddle, K., & Warwick, C. (2003). Can we prevent postnatal depression? A randomized controlled trial to assess the effect of continuity of midwifery care on rates of postnatal depression in high-risk women. *Journal of Maternal – Fetal & Neonatal Medicine*, 13(2), 119-127.
- Matthey, S., Kavanagh, D. J., Howie, P., Barnett, B., & Charles, M. (2004). Prevention of postnatal distress or depression: An evaluation of an intervention at preparation for parenthood classes. *Journal of Affective Disorders*, 79(1-3), 113-126.
- Mauthner, N. S. (1995). Postnatal depression: The significance of social contacts between mothers. *Women's Studies International Forum*, 18(3), 311-323.
- Mauthner, N. S. (1998a). It's a woman's cry for help: A relational perspective on postnatal depression. *Feminism & Psychology*, 8, 325-355.
- Mauthner, N. S. (1998b). Re-assessing the importance and role of the marital relationship in postnatal depression: Methodological and theoretical implications. *Journal of Reproductive & Infant Psychology*, 16(2-3), 157-175.
- McIntosh, J. (1993). Postpartum depression: Women's help-seeking behaviour and perceptions of cause. *Journal of Advanced Nursing*, 18(2), 178-184.
- Meager, I. & Milgrom, J. (1996). Group treatment for postpartum depression: A pilot study. *Australian & New Zealand Journal of Psychiatry*, 30(6), 852-860.
- Meltzer, E. S. & Kumar, R. (1985). Puerperal mental illness, clinical features and classification: A study of 142 mother-and-baby admissions. *British Journal of Psychiatry*, 147, 647-654.
- Menaghann, E. G. (1990). Social stress and individual distress. *Research in Community and Mental Health*, 6, 107-141.
- Miller, L. J. (2002). Postpartum depression. *Journal of the American Medical Association*, 287(6), 762-765.
- Morrell, C. J., Spiby, H., Stewart, P., Walters, S., & Morgan, A. (2000). Costs and effectiveness of community postnatal support workers: Randomised controlled trial. *British Medical Journal*, 321(7261), 593-598.

- Murray, L. (1988). Effects of postnatal depression on infant development: Direct studies of early mother-infant interactions. In R. Kumar & I. F. Brockington (Eds.), *Motherhood & Mental Illness 2: Causes and Consequences*. London: Wright.
- Murray, L., Woolgar, M., & Cooper, P. (2004). Detection and treatment of postpartum depression. *Community Practitioner*, 77(1), 13-17.
- Muzik, M., Klier, C. M., Rosenblum, K. L., Holzinger, A., Umek, W., & Katschnig, H. (2000). Are commonly used self-report inventories suitable for screening postpartum depression and anxiety disorders? *Acta Psychiatrica Scandinavica*, 102(1), 71-73.
- Navaie-Waliser, M., Martin, S. L., Tessaro, I., Campbell, M. K., & Cross, A. W. (2000). Social support and psychological functioning among high-risk mothers: The impact of the Baby Love Maternal Outreach Worker Program. *Public Health Nursing*, 17(4), 280-291.
- Neter, E., Collins, N. L., Lobel, M., & Dunkel-Schetter, C. (1995). Psychosocial predictors of postpartum depressed mood in socioeconomically disadvantaged women. *Women's Health*, 1(1), 51-75.
- Nhiwatiwa, S., Patel, V., & Acuda, W. (1998). Predicting postnatal mental disorder with a screening questionnaire: A prospective cohort study from Zimbabwe. *Journal of Epidemiology & Community Health*, 52(4), 262-266.
- Nicolson, P. (1990). Understanding postnatal depression: A mother-centred approach. *Journal of Advanced Nursing*, 15(6), 689-695.
- Nishizono-Maher, A., Kishimoto, J., Yoshida, H., Urayama, K., Miyato, M., Otsuka, Y. et al. (2004). The role of self-report questionnaire in the screening of postnatal depression – a community sample survey in central Tokyo. *Social Psychiatry & Psychiatric Epidemiology*, 39(3), 185-190.
- Nott, P. N. (1987). Extent, timing and persistence of emotional disorders following childbirth. *British Journal of Psychiatry*, 151(), 523-527.
- O'Hara, M. W. (1986). Social support, life events, and depression during pregnancy and the puerperium. *Archives of General Psychiatry*, 43(6), 569-573.
- O'Hara, M. W. & Gorman, L. L. (2004). Can postpartum depression be predicted? *Primary Psychiatry*, 11(3), 42-47.
- O'Hara, M. W., Rehm, L. P., & Campbell, S. B. (1982). Predicting depressive symptomatology: Cognitive-behavioral models and postpartum depression. *Journal of Abnormal Psychology*, 91(6), 457-461.
- O'Hara, M. W. & Zekoski, E. M. (1988). Postpartum depression: A comprehensive review. In I.F.Brockington & R. Kumar (Eds.), *Motherhood and Mental Illness 2: Causes and Consequences*. London: Wright.
- O'Hara, M. W., Zekoski, E. M., Phillips, L. H., & Wright, E. J. (1990). Controlled prospective study of postpartum mood disorders: Comparison of childbearing and non-childbearing women. *Journal of Abnormal Psychology*, 99(1), 3-15.
- Okano, T., Koshikawa, N., Nomura, J., & Tatsunuma, T. (1992). Cross-cultural study of maternity blues and post-partum depression. Ref Type: Unpublished Work.
- Paffenbarger, R. S. (1961). The picture puzzle of the postpartum psychoses. *Journal of Chronic Diseases*, 13(), 161-173.
- Panella, M., Marchisio, S., & Di Stanislao, F. (2003). Reducing clinical variations with clinical pathways: do pathways work? *Int J Qual Health Care*, 15(6), 509-521.
- Patel, V., Araya, R., de Lima, M., Ludermir, A., & Todd, C. (1999). Women, poverty and common mental disorders in four restructuring societies. *Social Science of Medicine*, 159, 1461-1471.
- Patel, V., Rodrigues, M., & DeSouza, N. (2002). Gender, poverty, and postnatal depression: A study of mothers in Goa, India. *American Journal of Psychiatry*, 159(1), 43-47.
- Pedersen, C. A., Stern, R. A., Pate, J., Senger, M. A., Bowes, W. A., & Mason, G. A. (1993). Thyroid and adrenal measures during late pregnancy and the puerperium in women who have been major depressed or who become dysphoric postpartum. *Journal of Affective Disorders*, 29, 201-211.
- Peindl, K. S., Wisner, K. L., & Hanusa, B. H. (2004). Identifying depression in the first postpartum year: Guidelines for office-based screening and referral. *Journal of Affective Disorders*, 80(1), 37-44.
- Pitts, F. (1995). Comrades in adversity: The group approach. *Health Visitor*, 68(4), 144-145.
- Pitts, F. (1999). Professional. Health visiting: The Monday group: Postnatal depression revisited. *Community Practitioner*, 72(10), 327-329.
- Platz, C. & K. R. (2004). A matched-control follow up and family study of 'puerperal psychoses'. *British Journal of Psychiatry*, 153, 90-94.

Interventions for Postpartum Depression

- Posner, N. A., Unterman, R. R., Williams, K. N., & Williams, G. H. (1997). Screening for postpartum depression. An antepartum questionnaire. *Journal of Reproductive Medicine*, 42(4), 207-215.
- Prendergast, J. & Austin, M.-P. (2001). Early childhood nurse-delivered cognitive behavioural counselling for post-natal depression. *Australian Psychiatry*, 9(3), 255-259.
- Priest, S. R., Henderson, J., Evans, S. F., & Hagan, R. (2003). Stress debriefing after childbirth: A randomised controlled trial. *Medical Journal of Australia*, 178(11), 542-545.
- Reid, A. J., Biringer, A., Carroll, J. D., Midmer, D., Wilson, L. M., Chalmers, B. et al. (1998). Using the ALPHA form in practice to assess antenatal psychosocial health. *Canadian Medical Association Journal*, 159(6), 677-684.
- Reid, M., Glazener, C., Murray, G. D., & Taylor, G. S. (2002). A two-centred pragmatic randomised controlled trial of two interventions of postnatal support. *BJOG: An International Journal of Obstetrics & Gynaecology*, 109(10), 1164-1170.
- Richman, J. A., Raskin, V. D., & Gaines, C. (1991). Gender roles, social support, and postpartum depressive symptomatology: The benefits of caring. *Journal of Nervous Mental Disorders*, 179, 139-147.
- Robinson, G. E. & Stewart, D. E. (2001). Psychological aspects of women's health care. In N.L.Stotland & D. E. Stewart (Eds.), (pp. 117-139). Washington, DC: American Psychiatric Press, Inc.
- Robling, S. A., Paykel, E. S., Dunn, V. J., Abbott, R., & Katona, C. (2000). Long-term outcome of severe puerperal psychiatric illness: A 23 year follow-up study. *Psychological Medicine*, 30(6), 1263-1271.
- Rowley, C. & Dixon, L. (2002). The utility of the EPDS for health visiting practice. *Community Practitioner*, 75(10), 385-389.
- Sandelowski, M., Docherty, S., & Emden, C. (1997). Focus on qualitative methods: Quantitative metasynthesis: Issues and techniques. *Research in Nursing Health*, 20, 365-371.
- Schopf, J., Bryois, C., Jonquiere, M., & Le, P. K. (1984). On the nosology of severe psychiatric post-partum disorders: Results of a catamnestic investigation. *European Archive of Psychiatry and Neurological Science*, 234, 54-63.
- Seguin, L., Potvin, L., St Denis, M., & Loisele, J. (1999). Depressive symptoms in the late postpartum among low socioeconomic status women. *Birth*, 26(3), 157-163.
- Shah, D. K., Wig, N. N., & Akhtar, S. (1971). Status of postpartum mental illness in psychiatric nosology. *Indian Journal of Psychiatry*, 13, 14-20.
- Sharp, H. M. & Bramwell, R. (2004). An empirical evaluation of a psychoanalytic theory of mothering orientation: Implications for the antenatal prediction of postnatal depression. *Journal of Reproductive & Infant Psychology*, 22(2), 71-89.
- Shields, N., Reid, M., Cheyne, H., Holmes, A., McGinley, M., Turnbull, D. et al. (1997). Impact of midwife-managed care in the postnatal period: An exploration of psychosocial outcomes. *Journal of Reproductive & Infant Psychology*, 15(2), 91-108.
- Sluckin, A. (2004). Bonding failure: "I don't know this baby, she's nothing to do with me". *Clinical Child Psychology & Psychiatry*, 3, 11-24.
- Small, R., Lumley, J., Donohue, L., Potter, A., & Waldenstrom, U. (2000). Randomised controlled trial of midwife led debriefing to reduce maternal depression after operative childbirth. *British Medical Journal*, 321(7268), 1043-1047.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15-28.
- Sptizer, R. L., Endicott, J., & Robins, E. (1978). Research diagnostic criteria: Rational and reliability. *Archives of General Psychiatry*, 35, 773-782.
- Stamp, G. E., Williams, A. S., & Crowther, C. A. (1996). Predicting postnatal depression among pregnant women. *Birth*, 23(4), 218-223.
- Steiner, M. (2002). Postnatal depression: A few simple questions. *Family Practice*, 19(5), 469-470.
- Stuart, S., O'Hara, M. W., & Gorman, L. L. (2003). The prevention and psychotherapeutic treatment of postpartum depression. *Archives of Women's Mental Health*, 6, Suppl-69.
- Tam, W. H., Lee, D. T., Chiu, H. F., Ma, K. C., Lee, A., & Chung, T. K. (2003). A randomised controlled trial of educational counselling on the management of women who have suffered suboptimal outcomes in pregnancy. *BJOG: An International Journal of Obstetrics & Gynaecology*, 110(9), 853-859.
- Tammentie, T., Paavilainen, E., Astedt-Kurki, P., & Tarkka, MT. (2003). Family dynamics of postnatally depressed mothers – discrepancy between expectations and reality. *Journal of Clinical Nursing*, 13, 65-74.

- Teissedre, F. & Chabrol, H. (2004). Detecting women at risk for postnatal depression using the Edinburgh Postnatal Depression Scale at 2 to 3 days postpartum. *Canadian Journal of Psychiatry*, 49(1), 51-54.
- Thome, M. & Alder, B. (1999). A telephone intervention to reduce fatigue and symptom distress in mothers with difficult infants in the community. *Journal of Advanced Nursing*, 29(1), 128-137.
- Thorpe, K. L., Dragonas, T., & Golding, J. (1992). The effects of psychological factors on the mother's emotional well-being during early parenthood: A cross-sectional study of Britain and Greece. *Journal of Reproductive Infant Psychology*, 10, 205-217.
- Troutman, B. R. & Cutrona, C. E. (1990). Nonpsychotic postpartum depression among adolescent mothers. *Journal of Abnormal Psychology*, 99, 69-78.
- Ugariza, D. N. (2000). Screening for postpartum depression. *Journal of Psychosocial Nursing & Mental Health Services*, 38(12), 44-51.
- Ugariza, D. N. (2004). Group therapy and its barriers for women suffering from postpartum depression. *Archives of Psychiatric Nursing*, 18(2), 39-48.
- Upadhyaya, A., Creed, F., & Upadhyaya, M. (1989). Psychiatric morbidity among mothers attending a well baby clinic: A cross-cultural comparison. *Acta Psychiatrica Scand*, 81, 148-151.
- Uwakwe, R. & Okonkwo, J. E. (2003). Affective (depressive) morbidity in puerperal Nigerian women: Validation of the Edinburgh Postnatal Depression Scale. *Acta Psychiatrica Scandinavica*, 107(4), 251-259.
- Verkerk, G. J., Pop, V. J., Van Son, M. J., & Van Heck, G. L. (2003). Prediction of depression in the postpartum period: A longitudinal follow-up study in high-risk and low-risk women. *Journal of Affective Disorders*, 77(2), 159-166.
- Vines, S. W. & Williams-Burgess, C. (1994). Effects of a community health nursing parent-baby (ad)venture program on depression and other selected maternal-child health outcomes. *Public Health Nursing*, 11(3), 188-194.
- Warner, R., Appleby, L., Whitton, A., & Faragher, B. (1996). Demographic and obstetric risk factors for postnatal psychiatric morbidity. *British Journal of Psychiatry*, 168(5), 607-611.
- Watson, E. & Evans, S. J. (1986). An example of cross-cultural measurement of psychological symptoms in post-partum mothers. *Social Science of Medicine*, 23, 869-874.
- Webster, J., Linnane, J. W., Dibley, L. M., & Pritchard, M. (2000). Improving antenatal recognition of women at risk for postnatal depression. *Australian & New Zealand Journal of Obstetrics & Gynaecology*, 40(4), 409-412.
- Webster, J., Linnane, J., Roberts, J., Starrenburg, S., Hinson, J., & Dibley, L. (2003). Identify, Educate and Alert (IDEA) trial: An intervention to reduce postnatal depression. *BJOG: An International Journal of Obstetrics & Gynaecology*, 110(9), 842-846.
- Webster, J., Pritchard, M. A., Creedy, D., & East, C. (2003). A simplified predictive index for the detection of women at risk for postnatal depression. *Birth*, 30(2), 101-108.
- Weich, S., Churchill, R., Lewis, G., & Mann, A. (1997). Do socio-economic risk factors predict the incidence and maintenance of psychiatric disorder in primary care? *Psychological Medicine*, 27(1), 73-80.
- Wells, K. B., Stewart, A., Hays, R. D., Burnam, M. A., Rogers, W., Daniels, M. et al. (1989). The functioning and well-being of depressed patients. Results from the Medical Outcomes Study. *Journal of the American Medical Association*, 262(7), 914-919.
- Wheatley, S. L., Brugha, T. S., & Shapiro, D. A. (2003). Exploring and enhancing engagement to the psychosocial intervention 'Preparing for Parenthood'. *Archives of Women's Mental Health*, 6(4), 275-285.
- Wheatley, S. L., Culverwell, A., Brugha, T. S., & Shapiro, D. A. (2000). Preparing for parenthood: Background and development of a risk modifying intervention to prevent postnatal depression. *Archives of Women's Mental Health*, 3(3), 81-90.
- Willinck, L. & Schubert, R. (2000). Antenatal Psychosocial Risk Assessment Project. *Australian College of Midwives*, 13(3), 7-12.
- Wood, A. F., Thomas, S. P., Droppleman, P. G., & Meighan, M. (1997). The downward spiral of postpartum depression. *MCN, American Journal of Maternal Child Nursing*, 22(6), 308-316.
- World Health Organization (2001). *The World Health Report 2001: Determinants of mental and behavioural disorders*. Geneva: World Health Organization.
- Yoshida, K., Marks, M. N., Kibe, N., Kumar, R., Nakano, H., & Tashiro, N. (1997). Postnatal depression in Japanese women who have given birth in England. *Journal of Affective Disorders*, 43(1), 69-77.
- Zlotnick, C., Johnson, S. L., Miller, I. W., Pearlstein, T., & Howard, M. (2001). Postpartum depression in women receiving public assistance: Pilot study of an interpersonal-therapy-oriented group intervention. *American Journal of Psychiatry*, 158(4), 638-640.

Appendix A: Glossary of Terms

Aetiology: Causes or origins of disease.

Antenatal: Referring to the period of pregnancy before birth.

Anxiety: The apprehensive anticipation of future danger or misfortune accompanied by a feeling of dysphoria or uneasiness.

Beck Depression Inventory (BDI): Measurement tool which contains 13 items describing a variety of depressive symptoms and attitudes. Each item is rated on a four-point scale to indicate the intensity of the symptom.

Center for Epidemiological Studies – Depression Scale (CES-D): is a self-administered, 20-item measure used to measure the frequency and severity of depressive symptoms in a general population. All items are rated on a frequency of symptom occurrence scale. For example, rarely or none of the time (0) to most or all of the time (3) (Radloff, 1977)

Clinical Practice Guidelines or Best Practice Guidelines: Systematically developed statements to assist practitioner and client decisions about appropriate health care for specific clinical (practice) circumstances (Field & Lohr, 1990).

Cognitive Behavioural Therapy: Highly structured psychotherapeutic method used to alter distorted thinking by identifying and replacing negative, inaccurate thoughts

Confidence Interval: An estimate of the amount of error in data.

Consensus: A process for making decisions, not a scientific method for creating new knowledge. At its best, consensus development merely makes the best use of available information, be that scientific data or the collective wisdom of the participants (Black et al., 1999).

Correlation Studies: Studies that identify the relationships between variables. There can be three kinds of outcomes: no relationship, positive correlation and negative correlation.

Cut-off Scores: A research determined score on the measure that indicates whether the individual is a case or not for the targeted disorder.

Depressive Symptoms: Symptoms comprised of a constellation of nine classic affective, cognitive and somatic or physiological symptoms as outlined in DSM-IV including: depressed mood, inability to enjoy previously enjoyable activities, feelings of worthlessness or excessive/inappropriate guilt, difficulty concentrating or thinking clearly, disturbed appetite, disturbed sleep, psychomotor retardation or agitation, fatigue or loss of energy and suicidal thoughts or actions.

DSM-IV: Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition.

Education Recommendations: Statements of educational requirements and educational approaches/strategies for the introduction, implementation and sustainability of the best practice guideline.

EPDS: The Edinburgh Postnatal Depression Scale.

Epidemiology: The studies of the incidence, distribution and control of disease.

Family: Consists of two or more people, whether living together or apart, related by blood, marriage, adoption, or commitment to care for one another.

False Positive: A positive result when in reality it is negative in nature.

False Negative: When a test wrongly shows an effect or condition to be absent.

Health Visitor: A Health Visitor is a qualified nurse who has undertaken further (post registration) training in order to be able to work as a member of the primary healthcare team. The role of the Health Visitor is about the promotion of health and the prevention of illness in all age groups.

Heterogeneous: A group with mixed in composition or having varying characteristics.

Homogeneous: A group having similar characteristics or attributes.

Informal Support: Support and resources provided by persons associated with the individual receiving care. Persons providing informal support may include: family, friends, neighbours and/or members of the community.

Interpersonal Psychotherapy: A process where healthcare professionals representing expertise from various healthcare disciplines participate in the process of supporting clients and their families.

Non-directive Counselling: Description of a counselling method where the counsellor is neutral about what is best but provides a safe and open environment for the client to explore their own feelings.

Meta-analysis: An overview in which quantitative methods are used to summarize the results of studies on a single topic. A meta-analysis is used to gain greater objectivity, generalizability and precision by including all high quality evidence from randomized control trials.

Montgomery-Asberg Depression Rating Scale (MADRS): This scale was originally designed to be sensitive to the change in depressive symptoms secondary to treatment. The measure contains ten items of reflecting depressive symptoms.

Morbidity: The incidence of disease in a population, including both fatal and nonfatal cases.

Multilparous: A woman who has given birth more than once.

Multiple Affect Adjective Checklist: This checklist is commonly used to measure mood. (Zuckerman & Lubin, 1988)

Organization & Policy Recommendations: Statements of conditions required for a practice setting that enable the successful implementation of the best practice guideline. The conditions for success are largely the responsibility of the organization, although they may have implications for policy at a broader government or societal level.

Positive predictive value: The proportion of people with a positive test who have the variable being tested for.

Postpartum Blues: A period to describe the first few weeks after delivery up to 15% of new mothers may experience tearfulness, fatigue, irritability, difficulty sleeping, mood swings, and other signs of the “baby blues”.

Postpartum Period: The period of time occurring immediately after a woman gives birth to 52 weeks.

Practice Recommendations: Statements of best practice directed at the practice of healthcare professionals that are evidence-based.

Psychotic: Any severe mental disorder in which contact with reality is lost or highly distorted.

Prescensing: As defined by Parse (1998), prescence emerges in the nurse – person process as a special way of being with in which the nurse is attentive to moment to moment changes in meaning as s/he is witness to the clients own living of value priorities.

Primary prevention: Primary prevention efforts aim to enhance protective factors and thereby reduce the onset of particular problems in the total population that could develop the condition in question (e.g., all postpartum women). In other words, primary prevention measures include activities that help prevent a given health care problem. Examples include immunization against disease as well as the promotion of self-care activities among new mothers. Since successful primary prevention not only reduces but also prevents the suffering, cost, and burden associated with disease, it is typically considered the most cost-effective form of health care.

Primiparous: A woman who has given birth only once.

Psychotropic Medication: Medication used to treat a mental health-related concern.

Psychometric Testing: In-depth psychological profiles of individuals covering both personality and intellectual ability.

Qualitative Research: Methods of data collection and analysis that are non-quantitative. Qualitative research uses a number of methodologies to obtain observational data or interview participants in order to understand their perspectives, world view or experiences.

Quasi-experimental: A research method that focuses on eliminating specific measures or factors that may have an effect on outcomes, leaving the intervention as a viable explanation for measured outcomes.

Randomized Controlled Trial (RCT): For the purposes of this guideline, a study in which subjects are assigned to conditions on the basis of chance, and where at least one of the conditions is a control or comparison condition.

Relative risk: Risk of harm among a population exposed to a potentially damaging substance, compared to the risk amongst an unexposed population.

Screening: A health service in which members of a defined population, who do not necessarily perceive they are at risk of a disease or its complications, are asked a question or offered a test, to identify individuals who are more likely to be helped than harmed by further treatment or interventions.

Secondary prevention: Secondary prevention efforts are targeted toward specific subgroups expected to be at higher risk for particular problems, with the aim to interrupt or slow the progress of a condition through early detection and treatment. These activities are focused on early case finding of diseases that occur commonly and have significant risk for negative outcome without treatment. Screening tests for diseases such as hypertension, breast and prostate cancer are examples of secondary prevention activities: they are done on individuals who do not yet show symptoms of the disease. With early case finding, the course of the illness can often be altered to maximize well-being and minimize suffering.

Self harm Ideation/Behaviour: Behaviour causing physical or psychological harm to one's self.

Sensitivity: A measure of how accurately a test describes the proportion of true positives of all the positives.

Specificity: A measure of how accurate a test describes the proportion of true negatives of all the negatives.

Suicidal ideation: The act of thinking and/or talking about the possibility of suicide as an option to a perceived intolerable circumstance.

Systematic review: Application of a rigorous scientific approach to the preparation of a review article (National Health and Medical Research Council, 1998). Systematic reviews establish where the effects of healthcare are consistent and research results can be applied across populations, settings, and differences in treatment (e.g., dose); and where effects may vary significantly.



Appendix B: Search Strategy for Existing Evidence

STEP 1 – Database Search

A database search for existing postpartum guidelines was conducted by a university health sciences library. An initial search of the MEDLINE, Embase and CINAHL databases for guidelines and articles published from January 1985 to July 2004 was conducted using the following search terms: “practice guideline(s)”, “clinical practice guideline(s)”, “standards”, “consensus statement(s)”, “consensus”, “evidence based guidelines” and “best practice guidelines”. After the scope of the guideline was established, a search was guided by the identified clinical questions and using the following search terms: “Postpartum depression, postnatal depression, puerperal depression, post-partum depression, post-natal depression. Combined with search strings using “maximum sensitivity” approach for aetiology and therapy”.

Summary of PPD literature Search

Total # of Articles	Inclusion Criteria
1135	Study is in English or French Study is a primary study or review Date of study publication is 1984 - 2004
45	Outcome is a <u>method of identification</u> of women with depressive symptomatology ie., validation of tools used in postpartum period; confirmation of clinical diagnosis
32	Outcome is a <u>preventive strategy</u> that nurses can implement in women with risk factors
29	Outcome is a <u>treatment intervention</u> that nurses can implement in women with depressive symptom (maternal outcomes only)

Search Strategy:

- (1) Databases searched: Medline, PsychLit, CINAHL, Cochrane Database, EMBASE, Cochrane Registry of Controlled Trials.
- (2) All abstracts reviewed for inclusion based on relevancy criteria.
- (3) Reference lists of all retrieved articles reviewed for additional articles.

STEP 2 – Structured Website Search

One individual searched an established list of websites for content related to the topic area. This list of sites, reviewed and updated in July 2004, was compiled based on existing knowledge of evidence-based practice websites, known guideline developers, and recommendations from the literature. Presence or absence of guidelines was noted for each site searched as well as date searched. The websites at times did not house a guideline but directed to another website or source for guideline retrieval. Guidelines were either downloaded if full versions were available or were ordered by phone/email.

- Agency for Healthcare Research and Quality: <http://www.ahrpr.gov>
- Alberta Heritage Foundation for Medical Research - Health Technology Assessment: <http://www.ahfmr.ab.ca/hta>
- Alberta Medical Association - Clinical Practice Guidelines: <http://www.albertadoctors.org>
- American College of Chest Physicians: <http://www.chestnet.org/guidelines>

Interventions for Postpartum Depression

- American Medical Association: <http://www.ama-assn.org>
- Bandolier Journal: <http://www.jr2.ox.ac.uk/bandolier>
- British Columbia Council on Clinical Practice Guidelines: <http://www.hlth.gov.bc.ca/msp/protoguides/index.html>
- British Medical Journal – Clinical Evidence: <http://www.clinicalevidence.com/ceweb/conditions/index.jsp>
- Canadian Centre for Health Evidence: <http://www.cche.net/che/home.asp>
- Canadian Cochrane Network and Centre: <http://cochrane.mcmaster.ca>
- Canadian Coordinating Office for Health Technology Assessment: <http://www.ccohta.ca>
- Canadian Institute of Health Information: <http://www.cihi.ca>
- Canadian Task Force on Preventive Health Care: <http://www.ctfphc.org>
- Centers for Disease Control and Prevention: <http://www.cdc.gov>
- Centre for Evidence-Based Mental Health: <http://cebmh.com>
- Centre for Evidence-Based Nursing: <http://www.york.ac.uk/healthsciences/centres/evidence/cebn.htm>
- Centre for Evidence-Based Pharmacotherapy: <http://www.aston.ac.uk/lhs/teaching/pharmacy/cebp>
- Centre for Health Evidence: <http://www.cche.net/che/home.asp>
- Centre for Health Services and Policy Research: <http://www.chspr.ubc.ca>
- Clinical Resource Efficiency Support Team (CREST): <http://www.crestni.org.uk>
- CMA Infobase: Clinical Practice Guidelines: <http://mdm.ca/cpgsnew/cpgs/index.asp>
- Cochrane Database of Systematic Reviews: <http://www.update-software.com/cochrane>
- Database of Abstracts of Reviews of Effectiveness (DARE): <http://www.update-software.com/cochrane>
- Evidence-based On-Call: <http://www.eboncall.org>
- Guidelines Advisory Committee: <http://gacguidelines.ca>
- Institute for Clinical Evaluative Sciences: <http://www.ices.on.ca>
- Institute for Clinical Systems Improvement: <http://www.icsi.org/index.asp>
- Institute of Child Health: <http://www.ich.ucl.ac.uk/ich>
- Joanna Briggs Institute: <http://www.joannabriggs.edu.au>
- Medic8.com: <http://www.medic8.com/ClinicalGuidelines.htm>
- Medscape Women's Health: <http://www.medscape.com/womenshealthhome>
- Monash University Centre for Clinical Effectiveness: <http://www.med.monash.edu.au/healthservices/cce/evidence>
- National Guideline Clearinghouse: <http://www.guidelines.gov>
- National Institute for Clinical Excellence (NICE): <http://www.nice.org.uk>
- National Library of Medicine Health Services/Technology Assessment Test (HSTAT):
<http://hstat.nlm.nih.gov/hq/Hquest/screen/HquestHome/s/64139>
- Netting the Evidence: A SchARR Introduction to Evidence-Based Practice on the Internet: <http://www.shef.ac.uk/scharr/ir/netting>
- New Zealand Guidelines Group: <http://www.nzgg.org.nz>
- NHS Centre for Reviews and Dissemination: <http://www.york.ac.uk/inst/crd>
- NHS Nursing & Midwifery Practice Dev. Unit: <http://www.nmpdu.org>
- NHS R & D Health Technology Assessment Programme: <http://www.hta.nhsweb.nhs.uk/htapubs.htm>
- NIH Consensus Development Program: <http://consensus.nih.gov/about/about.htm>
- PEDro: The Physiotherapy Evidence Database: <http://www.pedro.fhs.usyd.edu.au/index.html>
- Queen's University at Kingston: <http://post.queensu.ca/~bhc/gim/cpgs.html>
- Royal College of General Practitioners: <http://www.rcgp.org.uk>
- Royal College of Nursing: <http://www.rcn.org.uk/index.php>
- Royal College of Physicians: <http://www.rcplondon.ac.uk>
- Sarah Cole Hirsh Institute – Online Journal of Issues in Nursing: <http://fpb.cwru.edu/HirshInstitute>
- Scottish Intercollegiate Guidelines Network: <http://www.sign.ac.uk>

- Society of Obstetricians and Gynecologists of Canada Clinical Practice Guidelines: http://www.sogc.medical.org/sogcnet/index_e.shtml
- SUMSearch: <http://sumsearch.uthscsa.edu>
- The Qualitative Report: <http://www.nova.edu/ssss/OR>
- Trent Research Information Access Gateway: <http://www.shef.ac.uk/scharr/triage/TRIAGEindex.htm>
- TRIP Database: <http://www.tripdatabase.com>
- U.S. Preventive Service Task Force: <http://www.ahrq.gov/clinic/uspstfix.htm>
- University of California, San Francisco: <http://medicine.ucsf.edu/resources/guidelines/index.html>
- University of Laval – Directory of Clinical Information Websites: <http://132.203.128.28/medecine>

STEP 3 – Search Engine Web Search

A website search for existing postpartum depression guidelines was conducted via the search engine “Google”, using the search terms identified above. One individual conducted this search, noting the search term results, the websites reviewed, date and a summary of the findings. The search results were further critiqued by a second individual who identified guidelines and literature not previously retrieved.

STEP 4 – Hand Search/Panel Contributions

Additionally, panel members were already in possession of a few of the identified guidelines as well as literature on the topic area.

STEP 5 – Core Screening Criteria for Guidelines

This above search method revealed two guidelines, several systematic reviews and numerous articles related to postpartum depression.

The final step in determining whether the clinical practice guideline would be critically appraised was to have panel members screen the guidelines based on the following criteria. These criteria were determined by panel consensus:

- Guideline is in English;
- Guideline is dated no earlier than 1999;
- Guideline is strictly about the topic area;
- Guideline was evidence-based, e.g., contained references, description of evidence, sources of evidence; and
- Guideline is available and accessible for retrieval.

Results of the Search Strategy

The results of the search strategy and the decision to critically appraise identified guidelines are itemized below. Two guidelines met the screening criteria and were critically appraised using the *Appraisal of Guidelines for Research and Evaluation* (AGREE Collaboration, 2001) instrument.

TITLE OF THE PRACTICE GUIDELINES RETRIEVED AND CRITICALLY APPRAISED

British Columbia Reproductive Care Program (2003). Reproductive mental illness during the perinatal period. British Columbia Care Program. [Electronic Version] Available: <http://www.rcp.gov/bc.ca>

Scottish Intercollegiate Guidelines Network (2002). Postnatal depression and puerperal psychosis. Scottish Intercollegiate Guidelines Network. [Electronic Version] Available: <http://www.sign.ac.uk/pdf/sign60.pdf>

Appendix C: Diagnostic and Statistical Manual of Mental Disorders (DSM) and Depressive Symptoms Description

DSM-IV Criteria for Major Depressive Disorder

Major depression is a syndrome with well-defined clinical features. Essential features of a major depressive episode include 5 or more of the following symptoms over a 2 week period. One symptom must include either depressed mood or a marked loss of interest or pleasure for at least two consecutive weeks.

Note: The symptoms may be defined by subjective or objective description.

- ✓ Depressed mood most of the day, nearly every day (e.g., feels sad, empty or appears tearful)
- ✓ Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day
- ✓ Significant weight loss (change of more than 5%)
- ✓ Insomnia or hypersomnia nearly every day
- ✓ Psychomotor agitation or retardation nearly every day
- ✓ Fatigue or loss of energy
- ✓ Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day
- ✓ Recurrent thoughts of death (not just fear of dying)
- ✓ The symptoms do not meet the criteria for a mixed episode
- ✓ The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas or functioning
- ✓ The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism)
- ✓ The symptoms are not better accounted for by bereavement, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation
- ✓ Postpartum onset specifier: Onset of episode within 4 weeks postpartum

Reprinted with permission from the Diagnostic and Statistical Manual of Mental Disorders, Copyright 2000. American Psychiatric Association.

Appendix D: Edinburgh Postnatal Depression Scale (EPDS) English

Reproduction of the EPDS in its entirety is restricted to print version only. The following is an excerpt of the EPDS for sample purposes.

How are you feeling?

As you have recently had a baby, we would like to know how you are feeling now. Please underline the answer which comes closest to how you have felt in the past 7 days, not just how you feel today. Here is an example, already completed.

I have felt happy:

Yes, most of the time

Yes, some of the time

No, not very often

No, not at all

This would mean: "I have felt happy some of the time during the past week". Please complete the other questions in the same way.

In the past 7 days

1. I have been able to laugh and see the funny side of things:

As much as I always could

Not quite so much now

Definitely not so much now

Not at all

©1987 The Royal College of Psychiatrists. The Edinburgh Postnatal Depression Scale may be photocopied by individual researchers or clinicians for their own use without seeking permission from the publishers. The scale must be copied in full and all copies must acknowledge the following source: Cox, J. L., Holden, J. M. & Sagovsky, R. (1987) Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782-786. Written permission must be obtained from the Royal College of Psychiatrists for copying and distribution to others or for republication (in print, online or by any other medium).

Translations of the scale, and guidance as to its use, may be found in Cox, J. L. & Holden, J. (2003) *Perinatal Mental Health: A Guide to the Edinburgh Postnatal Depression Scale*. London: Gaskell.

The hard copy of the guideline Interventions for Postpartum Depression is available through the Registered Nurses' Association of Ontario. For more information and an order form, please visit the RNAO website at www.rnao.org/bestpractices.

Appendix E: Échelle de dépression postpartum d'edinburgh

La reproduction de l'échelle est réservée uniquement pour les copies papier. Ce qui suit est un extrait de l'échelle aux fins d'échantillons.

Comment vous sentez-vous?

Vous venez d'avoir un bébé. Nous aimerions savoir comment vous vous sentez. Nous vous demandons de bien vouloir remplir ce questionnaire en soulignant la réponse qui semble mieux décrire comment vous vous êtes sentie durant la semaine (c'est-à-dire les 7 jours qui viennent de s'écouler) et donc ne pas seulement vous basez sur la journée d'aujourd'hui pour répondre aux questions. Voici un exemple :

Je me suis sentie heureuse :

Oui, tout le temps

Oui, la plupart du temps

Non, pas très souvent

Non, pas du tout

Ceci signifiera « je me suis sentie heureuse la plupart du temps durant la semaine qui vient de s'écouler ». Merci de bien vouloir répondre aux autres questions.

PENDANT LA SEMAINE QUI VIENT DE S'ÉCOULER :

1. J'ai pu rire et prendre les choses du bon côté :

Aussi souvent que d'habitude.

Pas tout à fait autant.

Vraiment beaucoup moins souvent ces jours-ci.

Absolument pas.

L'Échelle Dépression Postpartum d'Edinburgh peut être photocopiée par des chercheurs individuels ou par des cliniciens pour des fins d'utilisations personnels sans avoir à obtenir la permission des éditeurs. L'échelle doit toutefois être copiée entièrement et chaque copie doit faire mention de la source suivante : Cox, J.L., Holden, J.M., & Sagovsky, R. (1987) Détection de Dépression Postpartum. Développement des 10 articles Échelle de Dépression Postpartum d'Edinburgh. *Journal de Psychiatrie*, 150, 782-786. Une permission écrite doit cependant être obtenue du Collège Royal des Psychiatres, en vue de copier, de distribuer à d'autres, ainsi que pour la reproduction (copie papier, à l'Internet ou par tout autres moyens).

Les traductions de l'échelle ainsi que les conseils quant à son utilisation, peuvent être retrouvés dans : Cox, J.L. & Holden, J. (2003) *Santé Mentale des Périnatales : Une Guide de l'Échelle Postpartum d'Edinburgh*. London : Gaskell.

La copie imprimée de la directive d'ordre Interpositions pour Dépression Postpartum est disponible de L'Association des infirmières et infirmiers autorisés de l'Ontario. Pour trouver plus d'information, visitez le site web de RNAO : HYPERLINK "<http://www.rnao.org/bestpractices>" www.rnao.org/bestpractices.

Appendix F: Administration and Interpretation of the EPDS

The EPDS can be administered to mothers anytime from birth to 52 weeks that have been identified with depressive symptoms either subjectively or objectively.

Instructions for the administration of the EPDS

1. The EPDS may be administered in person.
2. Efforts should be made to have the mother complete the scale by herself, where she feels she can answer the questions honestly.
3. Mothers may need assistance with the EPDS if they have limited reading skills or understanding of the English language.
4. All 10 items on the questionnaire must be completed.
5. The mother or health care professional should underline the response that best describes the mother's feelings in the last week.
6. The EPDS can be administered anytime from 0 to 52 weeks.

Sample lead in statements

Please be as open and honest as possible when answering these questions. It is not easy being a new mother and it is OK to feel unhappy at times. As you have recently had a new baby, we would like to know how you are feeling. Please state the answer which comes closest to how you have felt during the past several days, not just how you are feeling today.

Scoring of the EPDS

Each response is scored 0, 1, 2 or 3 based on the increased severity of the symptoms. Calculate the total score by adding together each of the 10 items.

Interpretation of the EPDS

1. The EPDS score must be considered in combination with the assessment of the health care provider.
2. A score of 13 or greater indicates the presence of depressive symptoms.
3. The score does not reflect the severity of the symptoms.
4. Use caution when interpreting the score of mothers who are non-English speaking and/or use English as a second language or are multicultural.
5. If a mother scores positive (1, 2 or 3) on self-harm item number 10, further assessment should be done immediately for self-harm ideation (refer to *Appendix H & I* for examples of sample questions).
6. Follow agency/institution protocol regarding scores.
7. Remember that the EPDS is only a tool. If your clinical judgment indicates differently than the EPDS continue with the follow up as the assessment indicates.

©1987 The Royal College of Psychiatrists. The Edinburgh Postnatal Depression Scale may be photocopied by individual researchers or clinicians for their own use without seeking permission from the publishers. The scale must be copied in full and all copies must acknowledge the following source: Cox, J. L., Holden, J. M. & Sagovsky, R. (1987) Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782-786. Written permission must be obtained from the Royal College of Psychiatrists for copying and distribution to others or for republication (in print, online or by any other medium).

Translations of the scale, and guidance as to its use, may be found in Cox, J. L. & Holden, J. (2003) *Perinatal Mental Health: A Guide to the Edinburgh Postnatal Depression Scale*. London: Gaskell.

Appendix G:

Summary Table of EPDS Cut-off Scores

Study	Country	Language	N
(Cox, Holden & Sagovsky, 1987)	UK	English	84
(Harris et al., 1989)	UK	English	147
(Murray & Cox, 1990)	UK	English	100
(Carothers & Murray, 1990)	UK	English	646
(Murray & Carothers, 1990)	UK	English	142
(Pop, Komproue & van Son, 1992)	Nether-lands	Dutch	303
(Boyce et al., 1993)	Australia	English	103
(Jadresic et al., 1995)	Chile	Spanish	108
(Zelkowitz & Milet, 1995)	Canada	English	89
(Wickberg & Hwang, 1996b)	Sweden	Swedish	128
(Areias et al., 1996)	Portugal	Portuguese	54
(Okano, Nagata, Hasegawa, Nomura & Kumar, 1998)	Japan	Japanese	-
Ghubash et al., 1997)	UAE	Arabic	93
(Guedeney, Fermanian, Guelfi & Kumar, 2000)	France	French	87
(Carpiniello et al., 1997)	Italy	Italian	61
(Lee et al., 1998)	Hong Kong	Chinese	142
(Bergant, Nguyen, Heim, Ulmer & Dapunt, 1998)	Austria	German	110
(Lawrie et al., 1998)	South Africa	English	102
(Clifford et al., 1999)	UK	Punjabi	98
(Benvenuti, Ferrara, Niccolai, Valoriani & Cox, 1999)	Italy	Italian	113
(Barnett, Matthey & Gyaneshwar, 1999)	Australia	English	105
		Arabic	98
		Vietnamese	113
(Thome, 2000)	Iceland	Icelandic	201
(Eberhard-Gran, Eskild, Tambs & Schei et al., 2001)	Norway	Norwegian	56
(Regmi, Sligl, Carter, Grut & Seear, 2002)	Nepal	English	100

Reproduced with permission. Dennis, C-L. (2003a). The Detection, Prevention, and Treatment of Postpartum Depression. In: D. E. Stewart, E. Robertson, C-L. Dennis, S.L. Grace, & T. Wallington, (2003). *Postpartum depression: Critical literature review and recommendations*. Toronto: Toronto Public Health.

Time	EPDS Cut-off	Sensitivity	Specificity	PPV
6 wks	12/13	86	78	73
6 wks	12/13	95	93	75
Pregnancy	12/13	64	90	50
6 wks	9/10	82	89	39
	12/13	96	68	68
6 wks	9/10	89	82	39
	12/13	68	96	67
4 wks	Correlations with other depression scales			
12 wks	9/10	100	89.4	47.4
	12/13	100	95.7	69.2
8-12 wks	9/10	100	80	37
	12/13	55	94	50
6-8 wks	9/10	91	76	78
	12/13	67	94	91
8-12 wks	11/12	96	49	-
24 wks	9/10	65	96	91
	12/13	29	96	90
-	8/9	75	93	50
1wk EPDS 8wk PSE	10/11	91	84	44
	12/13	73	90	50
16 wks	9/10	84	78	30
	12/13	60	97	78
4-6 wks	9/10	100	83	50
	12/13	67	100	100
6 wks	9/10	82	86	44
	12/13	41	95	-
4 days	9/10	96	100	100
6 wks	9/10	84	57	39
	12/13	76	82	58
6-8 wks	Conceptual and cross-cultural equivalence			
8-12 wks	9/10	83	90	60
	12/13	56	99	91
6 wks	9/10	100	69	13
	12/13	100	89	29
	9/10	78	80	29
	12/13	56	91	39
	9/10	86	84	27
	12/13	57	94	40
8-12 wks	Cronbach's alpha 0.80			
8-12 wks	9/10	100	87	-
8-12 wks	12/13	100	93	42

Appendix H: Suicidal Ideation Resource Sheet

Some women have thoughts or images about harming themselves.

Begin the discussion with:

“Often when women are depressed, they have negative thoughts about harming themselves.”

Proceed through the following questions:

In the past month, did you:			Points
Think that you would be better off dead or wish you were dead?	NO	YES	1
Want to harm yourself?	NO	YES	2
Think about suicide?	NO	YES	6
Have a suicide plan?	NO	YES	10
Attempt suicide?	NO	YES	10
In your lifetime:			
Did you ever make a suicide attempt?	NO	YES	4

Is at least 1 of the above coded YES?

If Yes, add the total number of points for the answers checked “YES” and specify the level of suicide risk as follows:

CURRENT SUICIDE RISK:

1-5 points Low
6-9 points Moderate
>10 points High

Reproduced with permission.

Copyright (2002). Sheehan, D.V., Lecrubier, Y., Harnett-Sheehan, K., Amorim, P., Janvas, J., Hergueta, T., Baker, R. & Dunbar, G. (1998). The Mini International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic interview. *Journal of Clinical Psychiatry*, 59(suppl 20), 22-33.

Appendix I: Other Risk Factors Resource Sheet

Although all women are susceptible to developing depression following childbirth, women who have one or more of the following factors have a significantly increased risk of experiencing postpartum depression.

Strong to Moderate Risk:

- Depression during pregnancy.
- Anxiety during pregnancy.
- Stressful recent life events.
- Lack of social support (either perceived or received).
- Previous history of depression.

Moderate Risk:

- High levels of childcare stress.
- Low self-esteem.
- Neuroticism.
- Difficult infant temperament.

Small Risk:

- Obstetric and pregnancy complications.
- Cognitive attributions.
- Quality of relationship with partner.
- Socioeconomic status.

No effect:

- Ethnicity.
- Maternal age.
- Level of education.
- Parity.
- Gender of child (within Western societies).

Reproduced with permission.

Source: Robertson, E., Celasun, N., and Stewart, D.E. Risk factors for postpartum depression. In Stewart, D.E., Robertson, E., Dennis, C-L., Grace, S. L. & Wallington, T. (2003). *Postpartum depression: Literature review of risk factors and interventions*. Toronto: Toronto Public Health.

Appendix J: Depression and Anxiety after Birth Resource Sheet

Depression and Anxiety After Birth

A woman may have many different feelings after her baby is born. Some of these feelings are joy and excitement, or guilt and sadness. This is quite normal after such an important event! Sometimes unhappy feelings become so difficult that a mother feels overwhelmed and out of control. If this happens, a woman may be suffering from postpartum depression and anxiety.

What are Postpartum Depression and Anxiety?

They are emotional problems which may happen to a mother after her baby is born. One mother in five experiences depression and anxiety after birth. These problems are more common than many people think. Every mother is different and may have different symptoms. These symptoms may happen shortly after birth or many months later.

What are the Symptoms?

Most women feel:

- sad.
- angry.
- guilty.
- alone.
- worried.
- inadequate.
- irritable.

Other feelings are:

- wanting to run away.
- not being able to cope.
- exhaustion – not being able to sleep even when the baby sleeps.
- isolation.

A mother who is new to Canada may also feel:

- lonely because her family and friends are far away.
- unfamiliar with the Canadian healthcare system.
- the absence of familiar comforts, traditions and rituals.

These feelings last for two weeks or more, and do not go away by themselves. This is a different situation than the “baby blues” (fatigue and tearfulness). The “baby blues” may appear shortly after birth and disappear on their own.

A mother may have “scary” thoughts of harming the baby or herself. These thoughts may increase if the mother is overtired or stressed. A doctor should be consulted.



What Causes Postpartum Depression and Anxiety?

The causes are not completely understood. Some causes may be:

- hormonal and chemical changes in the body.
- stress and lack of support.
- adjusting to motherhood.

A history of emotional, physical or sexual abuse may be a factor.

Why Do So Many Women Suffer in Silence?

- they may hide their feelings.
- they may feel ashamed and guilty.
- health care professionals may not recognize the depression or anxiety.
- partners and families may not take the situation seriously.

What Can Help?

- speak to a healthcare provider, family member, friend or counsellor.
- ask for the location of a postpartum support program.
- make sure that the mother gets enough food and rest.
- understand that this is not the mother's fault.
- accept and understand that a new mother cannot do everything.
- ask for help from others.
- be willing to try things that may be unfamiliar such as counselling, group support, or medication.
- take one day at a time.

Remember: **There is help available.** **It won't last forever.**

If you have concerns or questions please call a nurse, your midwife, nurse practitioner, clinic or doctor.

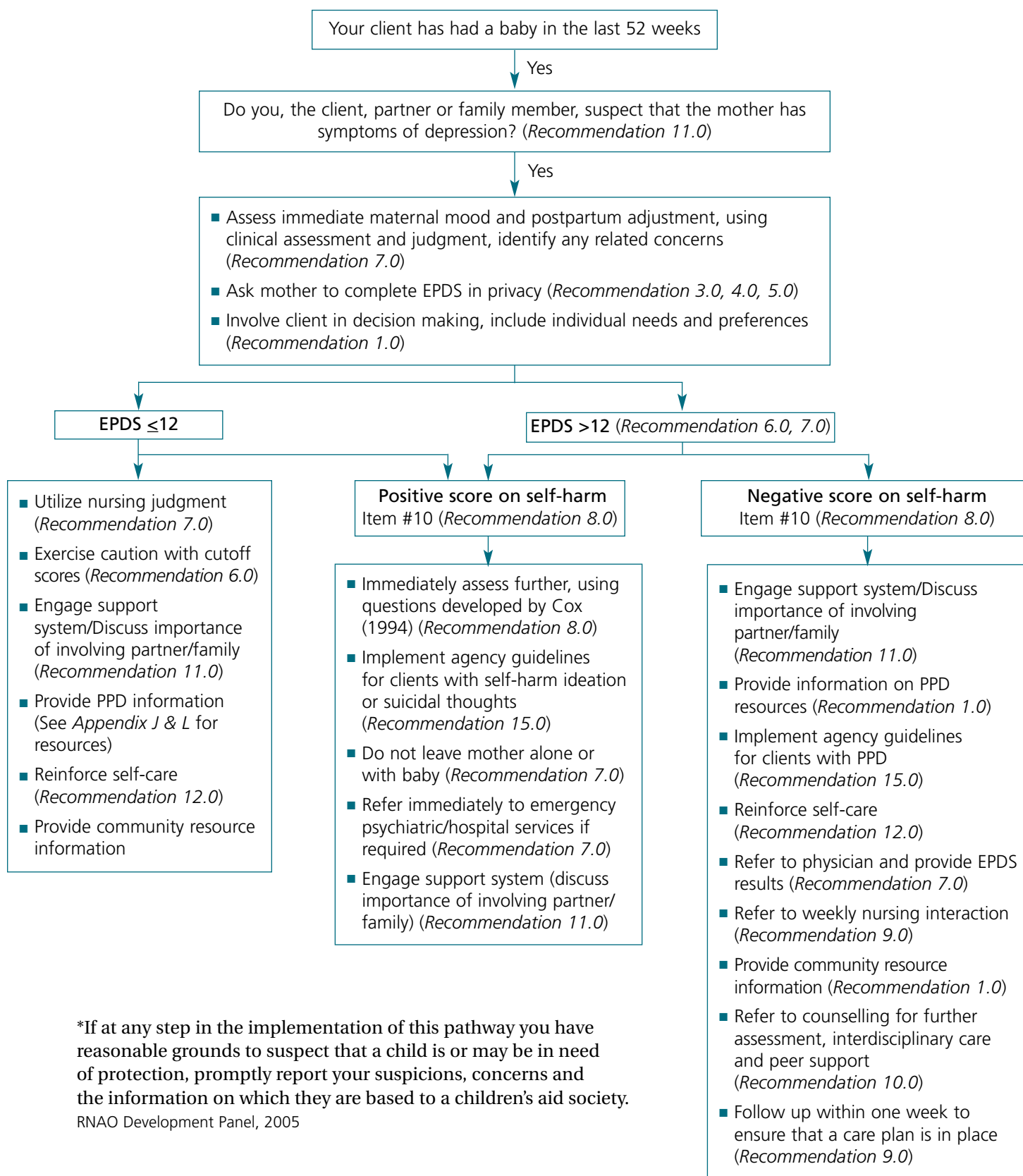
Reproduced with permission.

Source: Multicultural Perinatal Network. (2004). Toronto: Toronto Public Health.

Also available in Arabic, Bengali, Chinese, French, Hindi, Korean, Punjabi, Somali, Spanish, Tamil, Urdu and Vietnamese.



Appendix K: Sample Care Pathway



Appendix L: Additional Resources

The development panel, with input from stakeholders, has compiled a list of organizations, websites and other resources that may be helpful for health professionals working with postpartum women experiencing postpartum depression.

Links to websites that are external to the RNAO are provided for your information purposes only. The RNAO is not responsible for the quality, accuracy, reliability, or currency of the information provided through these sources. Further, the RNAO has not determined the extent to which these resources have been evaluated. Users wishing to rely upon this information should consult directly with the source. This applies to suggested books and videos as well.

Internet Sources

Depression After Delivery: www.depressionafterdelivery.com

- Provides information and education for women and families affected by postpartum depression.

Helpformom: www.helpformom.ca

- Offers public and professional awareness of postpartum depression along with access to a variety of community agencies in the London, Ontario area.

Maternal and Child Health: www.mchlibrary.info/KnowledgePaths/kp_postpartum.html

- Compilation of information, resources, and links for health professionals and consumers.

Mood Disorders Society of Canada: www.mooddisorderscanada.ca

- Offers awareness, education, advocacy, and research.

Motherisk: www.motherisk.org

- Professional information about the safety or risk of drugs, chemicals and disease during pregnancy and lactation.

Our Sisters' Place: www.oursistersplace.ca

- Provides information/support for women with mood disorders related to hormonal changes.

Pacific Postpartum Support Society: www.postpartum.org

- Offers support and information for women with postpartum depression and their families. Provides manuals on coping, developing support groups and telephone counselling programs.

Postpartum Depression Community: www.ppdsupportpage.com

- Consumers and survivors share support and information online with others.

Postpartum Support International: www.postpartum.net

- Provides education and information for women with postpartum mood disorders and their families.

Interventions for Postpartum Depression

St. Joseph's Health Centre: www.stjosham.on.ca

- Provides information about pregnancy and postpartum related mood changes.

The British Columbia Reproductive Mental Health Program: www.bcrmh.com/disorders/postpartum.htm

- Focuses on emotional issues and treatment related to women, including perinatal mood disorders.

The Marcé Society: www.marcesociety.com

- International research into the understanding, prevention and treatment of mental illness related to childbearing.

Suggested Books

For Health Professionals

- Cox, J. & Holden, J. (2003). *Perinatal mental health: A guide to the Edinburgh Postnatal Depression Scale*. London: Gaskell.
- Dunnewold, A. (1997). *Evaluation & treatment of postpartum emotional disorders (Practitioner's Resource Series)*. Florida: Professional Resource Press.
- Hale, T. W. (2004). *Medications and mother's milk*. Amarillo, TX: Pharmasoft Publishing.
- Kendall-Tackett, K. A. (2005). *Depression in new mothers: Causes, consequences, and treatment alternatives*. Toronto: University of Toronto Press.
- Milgrom, J., et al. (2000). *Treating postnatal depression: A psychological approach for health care practitioners*. Canada: John Wiley and Sons, Ltd.
- Miller, L.J., Ed. (1999). *Postpartum mood disorders*. Arlington, VA: American Psychiatric Association Publishing Group.
- Postpartum Depression – A medical dictionary, bibliography, and annotated research guide to internet references. (2004). San Diego, CA Icon Health Publications.
- Ross, L., Dennis, C.-L., Robertson, E., & Stewart, D. E. (2005). *Postpartum depression: A guide for front-line health and social service providers*. Toronto: Centre for Addiction and Mental Health.

For Consumers

- Bennett, S. & Indman, P. (2003). *Beyond the blues: A guide to understanding and treating prenatal and postpartum depression*. San Jose, CA: Moodswings Press.
- Dunnewold, A. & Sanford, D. (1994). *Postpartum survival guide: It wasn't supposed to be like this*. California: New Harbinger Publications.
- Kleiman, K. & Raskin, V. (1994). *This isn't what I expected: Overcoming postpartum depression*. New York: Bantam Books.
- Misri, S. (1995). *Shouldn't I be happy? Emotional problems of pregnant and postpartum women*. New York: Free Press.
- Pacific Postpartum Support Society. (2001). *Postpartum depression and anxiety: A self-help guide for mothers*. Vancouver, B.C. (604-255-7999).
- Rosenberg, R., Greening, D. & Windell, J. (2003). *Conquering postpartum depression: A proven plan for recovery*. Cambridge, MA: Perseus Publishing.
- Sebastian, L. (1998). *Overcoming postpartum depression & anxiety*. Omaha, NE: Addicus Books.

Suggested Videos

Fragile Beginnings: Postpartum Mood and Anxiety Disorders (1993)

Driscoll, J. W.

Injoy Videos

Boulder, Colorado

To order: www.injoyvideos.com or (800-326-2082, ext. 2)

Heartache and Hope: Living through Postpartum Depression (2000)

Parent Development Centre

Calgary, Alberta

To order: www.familiesmatter.ca (403-205-5178)

Hope and Healing: Postpartum Depression (1993)

St. Joseph's Women's Health Centre

Toronto, Ontario

To order: 416-530-6850

More than Baby Blues: Unmasking Postpartum Depression (2003)

Nonacs & Klein

Brewster, MA : Paraclete Video Productions

To order: www.paracletepress.com

Postpartum Emotions: The Blues & Beyond (1995)

Dunnewold, A.

Austin TX: Family Experiences Productions, Inc.

To order: www.fepi.com (512-494-0338)

Understanding Postnatal Depression (2003)

Wise, L.

Great Britain: PND Productions

To order: www.postnataldepression.com

Appendix M: Description of the Toolkit

Best practice guidelines can only be successfully implemented if there are: adequate planning, resources, organizational and administrative support as well as appropriate facilitation. In this light, RNAO, through a panel of nurses, researchers and administrators has developed the *Toolkit for Implementation of Clinical Practice Guidelines* (2002) based on available evidence, theoretical perspectives and consensus. The *Toolkit* is recommended for guiding the implementation of any clinical practice guideline in a health care organization.

The *Toolkit* provides step-by-step directions to individuals and groups involved in planning, coordinating, and facilitating the guideline implementation. Specifically, the *Toolkit* addresses the following key steps in implementing a guideline:

1. Identifying a well-developed, evidence-based clinical practice guideline.
2. Identification, assessment and engagement of stakeholders.
3. Assessment of environmental readiness for guideline implementation.
4. Identifying and planning evidence-based implementation strategies.
5. Planning and implementing evaluation.
6. Identifying and securing required resources for implementation.

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The *Toolkit* is one key resource for managing this process.

The *Toolkit* is available through the Registered Nurses' Association of Ontario. The document is available in a bound format for a nominal fee, and is also available free of charge from the RNAO website. For more information, an order form or to download the *Toolkit*, please visit the RNAO website at www.rnao.org/bestpractices.

Notes:

[illegible]

Notes:

[illegible]

Notes:

[illegible]

Notes:

[illegible]

Notes:

[illegible]

Notes:

[illegible]

April 2005

Nursing Best Practice Guideline

Interventions for Postpartum Depression



*This program is funded
by the Government of Ontario*



0-920166-66-0



RNAO

Registered Nurses' Association of Ontario
L'Association des infirmières et infirmiers
autorisés de l'Ontario

NURSING BEST PRACTICE GUIDELINES PROGRAM